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Factors affecting nurses' preconceived notions towards geriatric clients

Patricia Krupski

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Factors affecting nurses' preconceived notions towards
geriatric clients.

By

Patricia Krupski

A Master Thesis Project

Submitted to Cardinal Stritch University College of Nursing

in partial fulfillment of the requirements for the degree

Master of Science in Nursing

Cardinal Stritch University

Milwaukee, Wisconsin

December, 2002


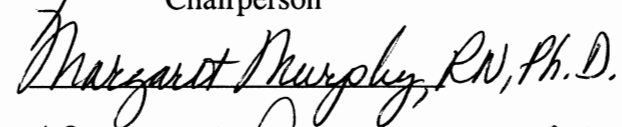
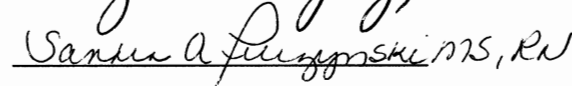
CARDINAL STRITCH UNIVERSITY
College of Nursing

THESIS/PROJECT DEFENSE
COMMITTEE APPROVAL FORM

November 15, 2002

We hereby recommend that the project prepared by Patricia Krupski, RN, BSN
entitled "Factors affecting nurses' preconceived notions towards geriatric clients.",
be accepted as fulfilling this part of the requirements for the Degree of Master of Science
in Nursing.

Committee:


Chairperson



Accepted:


Dean

ABSTRACT

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By

Patricia Krupski

Master of Science in Nursing

Cardinal Stritch University College of Nursing

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Dr. Ruth Waite, Chairperson

ABSTRACT

With the geriatric population increasing and doubling by the year 2030, their health care needs are also increasing. However, preconceived notions of medical/surgical registered nurses about geriatrics clients may affect the way that the nursing staff will interact with geriatric clients. The purpose of this study was to examine the hypothesis: There is a relationship between selected demographic variables and preconceived notions of practicing medical/surgical registered nurses about geriatric clients. An e-mail questionnaire was sent to 150 State of Wisconsin licensed, practicing, medical/surgical registered nurses. This questionnaire included the Palmore's Facts of Aging Quiz 1 and asked for respondents' demographical information.

Two of the survey questions were answered incorrectly with a positive bias, two were answered incorrectly with a neutral bias, and six were answered incorrectly with a negative bias. The Chi-square and Cramer's V tests were used to examine the relationship between demographic variables and preconceived notions of medical/surgical registered nurses. The data did not suggest that the survey questions were affected by a relationship between preconceived notions held by nurses about geriatric clients and individual demographic variables of practicing medical/surgical registered nurses.

This research will assist nurse educators, staff developers and patient educators to better understand the various beliefs that they hold, as well as those of practicing nurses and nursing students, about geriatric clients. Through knowledge gained, the student or nurse will have a clearer understanding of their personal beliefs about their geriatric clients, thereby improving the care that they provide to these clients.

Acknowledgements

The completion of this project is the achievement of a goal, which I have had since I began my nursing career. This goal was to look into preconceived notions of nurses who were dealing with geriatric patients. Many have been involved in the achievement of this goal including my family, friends and coworkers. However, several people have been instrumental in its completion.

The continuous support, direction, guidance and advice of Dr. Ruth Waite, chairperson of this thesis, was greatly respected and valued. The support and suggestions from the other members of the committee, Dr. Margaret Murphy and Sandi Pelczynski, MSN, RN, was also greatly valued and appreciated.

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The final person without who this thesis would not have been possible is not here to see its completion. My father, Henry Dombrowski, always told me to go after my dreams and stick to them until they were completed. He supported me throughout my life and always believed in me. When I thought about stopping, it was the memory of his words that kept me focused on the completion of this project.

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Chapter 1

Statement of Problem

According to the Administration on Aging (2001), the geriatric population is now “12.4% of the United States population or one out of eight Americans. By the year 2030, the older population will more than double to about 70 million”(p.1). As the geriatric population increases, their health care needs also increase.

Chronic illness will become a main concern of the healthcare staff serving geriatric clients. These illnesses are on the increase because of longer life spans. In addition, limitations on activities because of chronic conditions increase with age. “Most older persons have at least one chronic condition and many have multiple conditions” (p.14).

To decrease the complications of chronic illnesses, the geriatric client will need to be taught how to stabilize his/her chronic illnesses. However, preconceived notions of medical/surgical registered nurses toward geriatric clients may affect the way that the nursing staff will interact with geriatric clients.

Background Information

This researcher became interested in how the preconceived notions of medical/surgical registered nurses affect the care of the increasing geriatric population, which they care for in their practice. When this researcher started her nursing career as a cardiac medical/surgical registered nurse, she cared for clients undergoing Coronary Artery Bypass Grafting who were mostly middle class, white, males under 60 years old. When talking to nurses from the unit, they would state that they felt comfortable caring for and performing treatments for these clients because of the similarities that made presenting standardized pre-and post-surgical teaching easy for the nurses who were caring for these clients.

Today, however, there is no typical client who is receiving Coronary Artery Bypass Grafting. The ages of these clients are now in their 70s, 80s and even 90s. They also come from diverse occupations, ethnic groups, genders and economic levels.

Many nurses that this researcher meets are uncomfortable working with this variety in their patients. This may be due to the changes from the typical population that nurses have cared for and the unfamiliarity with geriatric clients for whom they need to adjust their instructions and caring. One example of the nurses being uncomfortable while caring for geriatric clients is in the field of teaching. Using standardized pre-and post-surgical teaching is no longer the norm.

One reason for these changes in teaching is that the Joint Commission For Accreditation of Hospital Organizations (JCAHO) requires age appropriate teaching and care for all clients in the hospital. Although all staff must participate in classes to fulfill this age appropriate requirement, many staff members find it difficult to change the way that they care for geriatric clients. It is important to adjust the teaching to the client's individual needs. Dietary differences, chronic limitations, and aging changes make standardized pre-and post-surgical teaching difficult or impossible at times.

Other nurses with whom this researcher comes into contact with have stated that they did not enter the nursing field to work with geriatric clients or that they believe there is no need to change how they teach with geriatric clients because everyone should be taught in the same way. In addition, some nurses have preconceived notions about geriatric clients' learning abilities or believe that geriatric clients cannot learn because of normal cognitive changes due to aging.

As a professional nurse working on a medical/surgical acute care unit, as a staff nurse, and as a supervisor in a long-term care facility, this researcher has presented programs and initiated self-learning packets to provide education for the nursing staff on the subject of caring for geriatric clients. This researcher has given in-service presentations to assist nurses to

understand preconceived notions about geriatric clients, to inform the staff about age appropriate strategies when teaching geriatric clients, and to help the staff in dealing with their feelings about geriatric clients.

Dail & Johnson (1986), Duerson, Thomas, Chang, & Stevens (1992), Rose (1984), Giardina-Roche & Black (1990), Slotterback & Saarnio (1996) and Heilker, et al. (1993) are other researchers who have addressed the preconceived notions of nursing and medical students. Geriatric nurses attitudes about geriatric clients were examined by Carter & MacInnes (1996), Glasspoole & Aman (1990), Harborne & Sooly (1996), Hatton (1977), Pursey & Luker (1995), and Huber, Reno & McKenney (1992). However, little research on practicing medical/surgical registered nurses' preconceived notions about geriatric clients has been addressed. This research project explored the preconceived notions of practicing medical/surgical registered nurses about geriatric clients.

Purpose of the Study

The purpose of this study was to determine if there was a relationship between preconceived notions of practicing medical/surgical registered nurses about geriatric clients and to determine if specific demographic variables of the nurses are related to their preconceived notions.

Research questions and Hypothesis

The major research question was: What are the preconceived notions of practicing medical/surgical registered nurses regarding the geriatric population? Other questions that may support or clarify the major research question were:

- 1) Is there a relationship between preconceived notions of practicing medical/surgical registered nurses about geriatric clients and specific demographic variables of the nurses?

- 2) Is there any one of the related demographic variables that was most strongly associated with preconceived notions of practicing medical/surgical registered nurses about geriatric clients?
- 3) Are the notions that nurses hold about geriatric clients more positively biased or negatively biased?

This study hypothesis states: There is a relationship between demographic variables and preconceived notions of practicing medical/surgical registered nurses about geriatric clients.

This study was an exploratory, qualitative study that examined the relationship between preconceived notions of practicing medical/surgical registered nurses about geriatric clients and selected demographic variables of the nurses. Hopefully, the data collected from the study can be used by educators to address preconceived notions when educating student nurses and offering education to practicing nurses. The tool used for this study was Palmore's (1977) Facts of Aging Quiz 1.

Significance of the Study

This topic is important to the professional nurse because the geriatric population will continue to increase in number and age each year. In addition, geriatric clients are living longer. As the geriatric population increases and gets older, their health care needs also increase. Many medical/surgical registered nurses have not chosen the geriatric population to be their major focus of care. However, these medical/surgical registered nurses will now need to incorporate care for geriatric clients into their daily practice. Knowledge about existing preconceived notions that nurses hold about geriatric clients will assist educators and nurses to improve nursing care of geriatric clients when treating and educating this group of clients.

As a profession, nursing must discover ways to make nurses aware that preconceived notions about geriatric clients may exist. Many nurses that I have worked with or have been in

school with have stated that they are uncomfortable working with this age group. They stated this is because in the past they have not dealt with the problems of aging presented by geriatric clients. These problems include vision changes, hearing changes, cognitive changes, and other physical changes.

In the past, very little research has addressed medical/surgical registered nurses' preconceived notions about the geriatric population. However, practicing medical/surgical registered nurses who have not been specifically educated to work with geriatric clients are caring for geriatric clients population.

Limitations of the Study

One limitation of the study was that this researcher was limited to nurses who are registered to practice in the State of Wisconsin. Nurses registered in the State of Wisconsin but not practicing or who are practicing outside the state were not included.

Another limitation was that the survey excluded nurses who identify themselves in specialties that do not include geriatric clients. The State of Wisconsin Department of Regulation and Licensing's nursing list has identified the specialty of the nurse by a code. This enabled this researcher to exclude those nurses who specialize in areas such as pediatrics and labor or delivery. If a nurse did respond to the survey who did not fit the criteria, the nurse was excluded when the surveys were returned. Question number seven which asked the nurse's specialty determined this.

The third limitation was that only nurses who have e-mail addresses identified on the State of Wisconsin Department of Regulation and Licensing's nursing list were included in the study.

The fourth limitation of the study was that not everyone who had email understood how to use it or was willing to send information over the Internet.

The fifth limitation of the study was this researcher's bias. This researcher believed that nurses do have preconceived notions about geriatric clients and that their demographic variables are the reasons for these preconceived notions.

Operational Definitions

Geriatric client Includes the adult population aged 65 or older who are being treated in the hospital, home, or clinic.

Demographic variables for this study included:

- Gender of the nurse
- Age of the nurse
- Marital status/living arrangement of the nurse
- Ethnicity of the nurse
- Number of years as a practicing nurse
- Highest nursing degree
- Specialty of the nurse
- Type of institution in which the nurse works
- Additional geriatric age related courses taken
- Desire to work with geriatric clients.

Negatively Biased Answers: Answers to the questionnaire that were incorrect showing that the nurses had an unfavorable viewpoint about geriatric clients.

Neutrally Biased Answers: Answers to the questionnaire that were incorrect showing that the nurses had neither a favorable nor an unfavorable viewpoint about geriatric clients.

Positively Biased Answers: Answers to the questionnaire that were incorrect showing that the nurses had a favorable viewpoint about geriatric clients.

Practicing medical/surgical registered nurses: Registered nurses who are providing direct client care in the hospital, home, or clinic. This excluded nurses who were working with non-geriatric clients including pediatrics, labor/delivery, or those nurses who specifically work with geriatric clients in nursing homes.

Assumptions of the Study

Major assumptions in this study were:

1. Medical/surgical registered nurses are not usually trained in strategies for working with geriatric clients.
2. Many medical/surgical registered nurses did not plan to care for mostly geriatric clients.
3. Many medical/surgical registered nurses have negatively biased preconceived notions about geriatric clients.
4. Many nurses have not learned age appropriate teaching strategies during their previous educational experiences.
5. Nurses who answer the questionnaire will answer the questions truthfully.

These assumptions were the basic principles that this researcher believed about the medical/surgical registered nurses who were asked to response to the questionnaire.

Chapter 2

Theoretical Framework

Healthcare workers, like all individuals, are a combination of their background, experiences, education, traditions and cultures. This combination creates the values by which an individual lives. Attitudes, both positive and negative, are formed by these values. Attitudes contribute to the formation of preconceived notions and stereotypes, which in turn are frequently the foundation of prejudices. "A person lives by his/her values, which by affirming his/her way of life often leads us to the brink of prejudice" (Allport, 1979, p. 25).

Allport's (1954) Theory of Prejudice as presented in his book *Theory of Prejudice 25th Anniversary Edition (1979)* looks at the theory of prejudice and how it applies to many different situations where attitude formation leads to prejudices. An examination of healthcare workers' attitudes about geriatric clients requires an understanding of attitude functions, particularly the role of categorization in forming stereotypes and prejudices about geriatric clients.

Allport (1954) defined attitude as "an individual's predisposition to evaluate a symbol, object or aspect of the individual's world as positive or negative" (p.2). Attitudes, consisting of both affective and cognitive components, perform basic functions for the personality. "One of these functions-the knowledge function-provides a method for understanding, organizing, and clarifying the individual's perceived world" (p.4).

When one hears the term 'old' used to describe an individual, an immediate mental picture is formed. If experiences have left a negative attitude about the geriatric population then a negative stereotype of this age group has been formed. Stereotypical and generalized attitudes provide an understandable frame of reference for individuals to interpret their universe.

The possession of stereotypes may interfere with even rational judgment. A stereotype "...acts as both a justificatory device for acceptance or rejection of a group and as a screening

device to maintain simplicity in perception and in thinking” (Allport, 1979, p. 192). Allport (1979) states, “The prejudiced person almost invariably explains his negative attitude in terms of some objectionable quality that marks the despised group” (p. 86). It is at this point that it is absolutely vital to know what information about the despised group is real and what is imaginary. The person needs to look at the objectionable quality realistically. However, this is not easy to do.

Was this an incident out of the person’s past where one member of the group did something wrong or did the prejudiced person hear about the objectionable quality from someone else in his/her circle? “Usually, there are good reasons for maintaining the grounds of prejudgment intact. It takes less effort to do so” (Allport, 1979, p. 24). “A prejudice is actively resistant to all evidence that would unseat it” (p.24).

Because the geriatric population is becoming a larger group of the general population, stories about their lives, problems and needs are reaching the public. Health care workers, as all individuals, have preconceived notions as to what happens when you age. Stereotypical stories about the geriatric population are “... socially supported, continuously revived and hammered in, by our media of mass communication---by novels, short stories, newspaper items, movies, stage, radio, and television” (Allport, 1979, p. 200).

Because of stereotypes, formation of prejudices begins. The way geriatric clients are treated may indicate prejudices. Frequently, the geriatric population is viewed as a drain on needed resources. Allport (1979) states, “The media suggests because the geriatric population is living longer that they are using up more of the retirement money, medical resources and government resources”(p.125).

As health care workers, it is necessary to discover where our attitudes, preconceived notions and prejudices about geriatric clients are faulty and correct them. Allport (1979) sums up prejudice as:

An antipathy based upon a faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group as a whole or toward an individual because he is a member of that group. The net effect of prejudice is to place the object of prejudice at some disadvantage not merited by his/her own misconduct. (p. 9)

Literature Review

A review of literature investigated five major topics related to nursing attitudes and preconceived notions about geriatric clients. These topics included:

- (1) General aging information
- (2) Attitudes of healthcare personnel whose primary focus is the geriatric client
- (3) Attitudes of various students in the healthcare field about the geriatric client
- (4) Attitudes of healthcare personnel whose primary focus is not the geriatric client
- (5) Attitude improvement about the geriatric client with education and communication

General aging information

According to the Administration on Aging (2001), the geriatric population is now "...12.4% of the United States population or one out of eight Americans"(p. 1). Charts offered by the Administration of Aging showed that the geriatric population in 1900 was only 6% of the population. "By the year 2030, this percentage is projected to increase to 20%" (p.10). "As the geriatric population increases, their health care needs also increase" (p. 13).

Getzen (2000) agreed that health care needs increase as the geriatric population increases when he said, "Older people, on average, inevitably require much more health care than do the

young.... Therefore, as the elderly share of the population increases, so will the demand for health care” (p. 98).

The Administration on Aging (2001) states:

Chronic health care will become a major concern for the healthcare staff serving geriatric clients because of the increase in their life span. The percentage of geriatric clients that report difficulty with chronic illness increases sharply with age. Limiting activities because of these chronic conditions increase with age. More than half of geriatric clients, 52.5%, have reported suffering from at least one chronic condition and many have multiple conditions. (p.14)

In 1995, 10.8 million or 37.2%, of older persons reported they were limited by chronic conditions. Over 4.4 million (14%) had difficulty in carrying out activities of daily living and 6.5 million (21%) reported difficulties with instrumental activities of daily living. (Administration on Aging, 2001, p.16).

According to Kovner & Mezey (2000) at this time “...older adults account for 60% of all ambulatory visits, 80% of home care visits, 48% of all hospital patients, 85% of all nursing home residents and 25% of all prescription drugs” (p. 63). Kovner & Mezey (2000) defined older adult as “those adults over 65 years of age” (p. 63). Kovner & Mezey’s (2000) study identify 48% for all hospital stays are geriatric clients compared to the 1997 information from the Administration on Aging (2001) that stated 36% of all hospital stays are geriatric clients.

Attitudes of healthcare personnel whose primary focus is the geriatric client

Carter & MacInnes’s (1996) study was designed to “assess changes in nurses’ attitudes to the process of decision-making regarding the care of elderly clients identified as being at risk of continuing (long-term) hospital care” (p. 448). The purpose of the study was to measure the attitudes of 50 specially trained elderly placement community nurses and 50 elderly care ward

nurses one week before the program of intervention was instituted for ward nurses and then eight months after the program was completed. The components of the intervention program were “(a) an early discharge planning service; and (b) an extended home care program” (p. 448).

A questionnaire was created to assess the attitudes of the nurses in the study who were caring for and placing the elderly in long-term care. The questionnaire included six pairs of opposite questions. “The Wilcoxin rank sum test was used to determine differences in the distribution of responses between community nurses and ward nurses” (p. 450).

Significant changes ($p < 0.05$) in attitudes were demonstrated after the program implementation for ward nurses. Three items were found to be significant when comparing the results of the questionnaire between community and ward nurses. These included:

1. Whether doctors and nurses or the elderly are in a better position to make decisions on hospital or home placement.
 - a. Sixty-nine percent of community nurses disagreed that nurses are in a better position to make decisions on hospital or home placement before the intervention compared to 47.6% of ward nurses.
 - b. Seventy-three point nine percent of ward nurses disagreed that nurses are in a better position to make decisions on hospital or home placement after the intervention.
2. Who had a more professional approach to decisions about client care?
 - a. Seven point one percent of community nurses agreed that nurses had a more professional approach to decisions about client care before the intervention compared to 30.9% of ward nurses.

- b. Ten point nine percent of ward nurses disagreed that nurses had a more professional approach to decisions about client care after the intervention.
- 3. Whether or not the elderly patient should be given a choice about place for care.
 - a. Twenty-six point two percent of community nurses agreed that elderly patients should be given a choice about place for care before the intervention compared to 16% of ward nurses.
 - b. Thirty point four percent of ward nurses disagreed that elderly patients should be given a choice about place for care after the intervention. (p. 450).

Carter & MacInnes's (1996) study indicated that teaching ward nurses which conditions to watch for in their clients to determine if long-term care is needed helped change attitudes of ward nurses caring for the elderly. In this study, education assisted nurses to understand that the elderly were able to make their own decisions appropriately. The attitudes by ward nurses about the elderly changed, and they encouraged autonomy of the elderly in health care issues.

Glasspoole and Aman's (1990) study indicated that the problem of attitudes about the elderly is worldwide. Their study was conducted in New Zealand at all medical facilities that cared for long-term gerontological patients. A questionnaire was sent to 556 nurses at 5 general public hospitals, 2 psychiatric hospitals, and 10 private nursing homes. The targeted population that returned the questionnaire was 378 nurses or 64% of those who received the questionnaire. (p. 11)

The questionnaire included a cover letter, Palmore's Facts of Aging Quiz 1 (1977), and questions on:

The respondents' conceptualizations of old age, their reasons for working with the elderly, their degree of happiness at work, aspects of geriatrics that are regarded as

aversive, and changes that the nurse felt would improve their work environment and improve the living situation of institutionalized elderly people. (p. 12)

The original study reported previously in another article, addressed nurses' attitudes and knowledge regarding psychotropic medication in elderly clients. The results reported in the article "Knowledge, attitudes, and happiness of nurses working with gerontological patients" presents secondary information obtained from this original study by Glasspoole & Aman (1988) called "Attitudes and knowledge of gerontological nurses towards psychotropic drugs." The language used in the Palmore's Fact on Aging Quiz 1 (1977), which was used as part of the study's questionnaire was found to be acceptable to the New Zealand researchers.

The results of the study indicated that of those answering the questionnaire (N=378), 62% had a special interest in the elderly and 88% were happy and satisfied with their work. When asked at what age they considered a client elderly, 64.2% of those responded stated, "it was when the client could not function as they wish that they were considered elderly" (pp.12-13). The majority of nurses, 76%, stated "...to increase job satisfaction they would like more time to interact in a supportive way with the elderly" (p. 13). The results of this study indicated that most of the nurses who were working with the elderly were doing so by choice and were satisfied with their work.

Harborne & Sooly's (1996) study examined nurses' attitudes when dealing with challenging behavior of hospitalized older adults. Forty-eight nurses working on wards specializing in the care of older adults were surveyed by a questionnaire designed by Harborne & Sooly(1996) that contained eighteen variables that can contribute to challenging behavior. These eighteen variables were developed through a pilot project and then refined with the help of staff nurses.

The hypotheses of the study were:

1. Nurses will make internal (such as personal emotions) rather than external or medical interventions for the causes of challenging behavior in older adults.
2. Internal attribution style will be related to negative emotions in staff, which can be used to predict negative behavioral responses by them.
3. These variables will vary according to age and grade (level of staff) (p. 40).

SPSS for Windows, no version stated, was used to analyze the hypotheses.

The results of the first hypothesis, which predicted that nurses would make internal rather than external or medical interventions for challenging behavior, suggested no significant differences at ($p > 0.05$). The researchers also hoped to prove that negative emotions towards the client would result in negative responses, however, no significant differences were found.

Harborne & Sooly (1996) suggested that these results suggested that nurses had a holistic approach to care (p.41).

To test the second hypothesis simple regression analyses was used. Negative emotions were found to be significantly associated with negative behavioral response ($p < 0.01$) and with age ($p < 0.005$). Negative emotions were also found to be significantly correlated with an internal attribution ($p < 0.005$), but not with external or medical attribution styles. No significant differences were found between the attribution styles by age or grade (level of staff). It was suggested by Harborne & Sooly (1996) that alternative ways of examining perceived causes of behavior should be examined. In addition, "The importance of reducing negative affect in staff is stressed" (p.43).

Hatton (1977) conducted a survey using Kogan's Attitudes Toward Old People Scale (1961) and physical observations of seven registered nurses. Kogan's Attitudes Toward Old People Scale (1961) is a scale to assess attitudes toward old people. The Kogan's Attitudes

Toward Old People Scale (1961) items were constructed in the form of positive-negative pairs, yielding two Old People scales. A higher score on the positive scale designates a favorable disposition toward old people, while a higher score on the negative scale denotes an unfavorable disposition (p. 24).

Hatton's purpose was to determine:

1. Whether a favorable disposition toward old people promotes an increased response to attend to individual geriatric patient needs.
2. Whether an unfavorable disposition toward old people promotes a decreased response to attend to individual geriatric patient needs. (p. 21).

Hatton used Kogan's Attitudes Towards Old People Scale (1961) and actual observations by the researcher of seven registered nurses who were working days and evenings at a long-term care facility. The answers were coded into units of precise description by the researcher and three experts. After coding the units, they were divided into positive and negative observations. "Although reliability of this analysis had not been established, content validity had been established." (Hatton, p.23-24). Each nurse's Kogan's Attitudes Toward Old People Scale (1961) score was compared to the results of the researchers' observations of the nurse.

According to Hatton (1977), "Although the variables were not statistically significant, there is a relationship between attitudes and positive interaction" (p. 24) of the nurses in the study. This means that those nurses, who had positive attitudes towards the elderly, seemed to have positive interactions with the elderly in their care.

Other findings, which were not the purpose of the study, were obtained. These findings included a lack of respect for personal space and territory by the nurses toward the clients. In addition, nurses who were observed interacting with a specific client have the same length of

interaction each time. Although Hatton's study included only seven nurses, questions for further studies were generated. These questions included:

1. What are the attitudes held by the nurses about the elderly?
2. How are the attitudes held by the nurses who care for the elderly important to improving nursing care for the elderly?

Huber, Reno, and McKenney's (1992) study compared long-term care employees' positive and negative attitudes, knowledge about myths of aging, and normal age changes. Subjects included Registered Nurses (RN), Licensed Practice Nurses (LPN), nursing assistants (NA), administration workers and support staff who worked at a long-term facility and who had continued contact with the residents at the facility. Participation was voluntary and anonymity was assured by using only the last four digits of social security numbers. Various testing times over a two-week period were offered at the facility.

Palmore's Facts on Aging Quiz Part 1 (1977) and Part 2 were used to compare the results of three 1-hour classes on the simulation of handicaps, normal age-related changes and myths and realities of aging. Palmore's Facts of Aging Quiz Part 2 (1981) is a 25 questions test, with similar but different questions than are presented in Palmore's Facts of Aging Quiz Part 1 (1977). Palmore's Facts of Aging Quiz 2 (1981) is used "...as a tool for test-retest situation, to avoid the problem of practice effects when the first form is repeated on the retest" (Palmore, 1981, p. 431). The two quizzes were used. There were 137 participants who participated in the pre-test and 123 who participated after the classes. Only 86 matched tests, which were identified by the last four digits of the employees' social security number, were used.

Only registered nurses did not have a significant improvement ($p=0.0942$) in their knowledge after the classes. Huber, Reno, and McKenney (1992) suggested that this was "the

results of continuing education, both in the facilities and meeting licensure requirements” (p. 1119).

All the groups improved their falsely negative biases toward the elderly after the classes with the support staff at ($p=0.0136$) improving the least, RNs at ($p=0.0051$), LPNs at ($p=0.0020$), administration at ($p=0.0008$) and NAs at ($p=0.0001$) improving the most. Falsely positive bias improvement was not significant in any of the groups. Huber, Reno, and McKenney suggested, “the learning activities need to include more emphasis on actual strengths that all elderly adults may exhibit” (p. 1119).

This study recommended that an increasing geriatric population must have staff to care for them who are informed and have attitudes that are positive. This can only be achieved by increasing gerontological education, not just task-oriented education, which will maximize the quality of care delivered in a long-term care system.

Pursey & Luker (1995) examined past experiences of nurses who specifically worked with the elderly. The researchers attempted to “...draw out the differences between nurses' attitudes towards work with older people in the collective sense, and their attitudes towards individual older people with whom they work” (p. 550).

Four educational institutions in northwestern England who provide visiting and practice nursing courses were included in the survey. “The study sample was one of convenience ($n = 136$) and consisted of 25 experienced health visitors, 62 student health visitors and 49 practice nurses” (p. 550).

The study was a two-phase multi-method study, which included a questionnaire designed by Pursey and Luker (1995) specifically for this study and an intensive, in-depth interview. The questionnaire included open-ended questions and demographic information, professional characteristics and current work involving people over the age of 65 years. Respondents were

also asked to write about two incidents from the hospital or community setting with the elderly. One incident was to be effective in the outcome toward the elderly and the other incident was to be ineffective in the outcome toward the elderly. (p. 552)

The questionnaire data was analyzed using SPSS-PC+ to create frequencies and correlations. To analyze the critical incidents and interview data an unidentified ethnographic computer package was used. Frustration towards the system, which presented barriers to effective nursing practice, was reported by 71% of the respondents. Ward routine was a source of frustration by 71% of those in the study. This routine determined the type of care respondents were able to give their patients. Because of the routine, they were unable to give the care they felt was needed. (p. 553).

Pursey and Luker (1995) stated that this study “identified that there may be a difference between nurses' negative feelings about the structural context of work and their more positive feelings about individual older people with whom they work” (p. 555). The study seemed to state that students and nurses are willing to working with individual clients but not the elderly as a whole. The researchers stated that “It seems reasonable to postulate that it is the construction of work with older people in its collective sense, rather than feelings or attitudes towards individual people, that leads nurses to avoid working in this specialty” (p.544).

In summary, Carter & MacInnes (1996), Glasspoole & Aman (1990), Harborn & Shatton (1992), Hatton (1977), Pursey & Luker (1995), and Huber, Reno & McKenney (1992) examined medical staff that work with the elderly and have chosen to work with this group of clients. Staff education was used as an intervention in the studies by Carter & MacInnes (1996), and Huber, Reno & McKenney (1992). These studies found that education did make a positive difference in how staff viewed the elderly.

Glasspoole & Aman's (1990) study indicated that most of the nurses who were working with the elderly were doing so by choice and were satisfied with their work. Harborne & Sooly (1992) suggested that although their study indicated no significance in how nurses reacted to challenging behavior, the study did indicate that nurses had a holistic approach to care. Hatton (1977) also found no statistically significant negative attitudes or negative interactions with clients. However, she believed that there is a relationship between attitudes and positive interaction of the nurses in the study. The Pursey & Luker (1995) study found that students and nurses are willing to work with individual clients but not the elderly as a whole. The common issue in all these studies examined healthcare personnel that normally work with geriatric clients.

Attitudes of various healthcare students in the healthcare field toward the elderly.

The next group of articles addressed healthcare students' attitudes and knowledge of the elderly. Dail & Johnson (1986), Duerson, Thomas, Chang, & Stevens (1992), and Rose (1984) used Palmore's Facts on Aging Quiz 1 (1977). Giardina-Roche & Black (1990) used pictures and a rating scale, Slotterback & Saarnio (1996) used two attitudinal questionnaires, and Heilker, et al. (1993) used Kogan's Attitudes Towards Old People Scale (1961). All the studies examined how students view the elderly.

Palmore's Facts on Aging Quiz 1 (1977) was used by Dail & Johnson (1986) to discover if a difference in the attitudes of the students was present after additional geriatric education. The sample for this study included two groups of 61 undergraduate students each from a large Midwestern university. One group had enrolled in a Human Development course that addressed age development from mid-childhood to old age, while the other group enrolled in a Child Development course. Each course lasted 10 weeks. Those in the Human Development course attended one hour of lecture weekly and engaged in volunteer work with an elderly adult for two

hours weekly. Those in the Child Development course attended one hour of lecture weekly and engaged in volunteer work with children two hours weekly.

Palmore's Facts of Aging Quiz 1 (1977) was given at the beginning and the end of both courses. A t-test was used to measure the scores for each group using the pre-and-post quiz score. The Human Development group showed a significant result ($p < 0.05$) suggesting that "...undergraduates benefit from direct instruction by acquiring a more accurate, factual information base about aging and the aged as a result of specific instruction in gerontology" (p. 65), while the Child Development group who did not receive instruction in gerontology had no significant results ($p < 0.05$).

Dail & Johnson (1986) believed that the Human Development students increased their scores on the Palmer's Facts of Aging Quiz 1 (1977), which was retaken after the classes and experiences. The authors support this claim because the Human Development group score was 74% of the Facts of Aging Quiz 1 (1977) compared to the Child Development group score of 68%. One drawback of the study was a lack of an attempt to discover why students who chose to work with the elderly were not included.

Third year medical students' knowledge and misconceptions toward the aged was tested in Duerson, Thomas, Chang, & Steven's (1992) study using Palmore's Facts on Aging quizzes. The three quizzes included Facts of Aging Quiz Part 1 (1977), Facts of Aging Quiz Part 2 (1981) and Facts of Aging and Mental Health Quiz (1985). The purpose of the study was "...to identify knowledge, bias and misconceptions regarding aging among five rotation groups which included 88 third year medical students" (p. 172).

Dail & Johnson (1986) added a third answer of "I don't know" (p. 172) to all three of Palmore's true and false quizzes that were given to the medical students as a pre-quiz on the first day of class and post-quiz after the end of the rotation. Dail & Johnson (1986) felt that this

would help them determine if the student was guessing at the answer or did not know the correct answer.

No significance in the mean scores of the pre and post quizzes given to the medical students was found between the five rotation groups in the study. T-tests were used to determine if there were significant differences between the pre-and-post quizzes mean scores of all three quizzes. A significant increase of mean scores was evident after the course at a significant level of $p < 0.0001$.

Attitudes were also tested to find out if there was any change after the course. The net increase of pro-aged bias score for the Facts of Aging Quiz Part 1 (1977) was 22.22% and for the Facts of Aging Quiz Part 2 (1981) was 16.42%. Pro-aged bias answers are incorrect but positively biased toward geriatric clients. The authors concluded, "...that education did improve pro-biases that the medical students had at the beginning of the program but did not decrease the anti-bias" (p. 173). Duerson, et al (1992) concluded that there was a change in attitudes and knowledge in all medical students; however, the change was so small that the authors felt that this change did not justify adding a geriatric course to the program.

Giardina-Roche and Black's (1990) study addressed the person perception paradigm. The person perception paradigm is an objective method allowing the employment of indirect measures of attitudes and perceptions adapted to a particular situation. (p. 210)

The study included 100 nursing students who had less than one year left in a self-directed program of nursing. The nursing students examined eight pictures of male clients one each at age 20, 30, 40, 50, 60, 70, 80, and 90 years old in various health situations. The students then read a scenario while viewing the person's picture and completing a rating scale of "...12 pairs of bipolar objectives" (p. 208) such as friendly-unfriendly or kind-unkind. At the end of the session, demographic information of the participant was obtained including "age, sex, current

status in the diploma program, previous education, experience with the elderly, and preference of work upon completion of the diploma nursing program” (p. 209). The males were presented as successful or unsuccessful. Those who were presented as successful were medically compliant while those who were presented as unsuccessful were not medically compliant.

Multivariate repeated measures of analysis of variance were used to analyze the rating scales of each picture shown to the students. The results of a positive evaluation on the health dimension for the successful 80-90 year old male was significant at $F(9.91)$ or $p < .001$. A t-test analysis was used to examine relationships between demographic variables and the person perception variables, which included clients’ ages, situation outcomes, competence, benevolence and health (pp. 211-12).

Although 98% of the students had experiences with the elderly, only 11% stated they would be working with the elderly after completion their studies. Giardina-Roche and Black (1990) suggested that this was due to “...the beliefs about the client population and/or because of an avoidance of the heavy physical work frequently required with some elderly” (p. 213). However, those students who chose geriatric clients had more favorable opinions of the 80-year-old whose health and personal information were presented as unsuccessful. According to Giardina-Roche and Black (1990):

Although most nursing students do not want to work with the elderly after graduation, students that have had positive experiences with the elderly have more positive attitudes towards the elderly than students who have had negative experiences. (pp. 211-12)

The purpose of Heilker’s, et al. (1993) study was to “...explore possible changes in attitudes toward older adults among students in the health care professions” (p. 371). This was to be achieved by offering experiences with well geriatric clients during students’ clinicals instead

of experiences with ill geriatric clients. The students included those in the schools of medicine, nursing, dentistry and dental hygiene.

Using Kogan's Attitudes Towards Old People Scale (1961) as a pre-and-post clinical test, 28 students were included in the study. The control group of 11 did not interact with geriatric clients while the experimental group of 17 had positive interactions with geriatric clients.

Before the interaction, a t-test analysis showed no significant difference between the groups. After the interaction of the experimental group with a geriatric client, a t-test was again used to compare both groups. The results of the analysis showed that the experimental group had a significant level of $p < 0.019$ when retested by Kogan's Attitudes Towards Old People Scale (1961) after the interactions with geriatric clients. These results suggested "...that a positive interaction with the elderly influenced the attitudes of students in a positive way" (p. 371).

Heilker, et al. (1993) summarized their study with the following quote. "Socialization is recognized as one component in the educational preparation of the health care professional. Attitudes, both positive and negative, are sometimes manifested and accepted by students without thoughtful consideration" (p. 372).

The purpose of Rose's (1984) study was to determine if a course in gerontology would improve attitudes of senior baccalaureate nursing students and improve the desire to work with the elderly. Forty-six senior nursing students agreed to participate in the quasi-experimental study.

The control group of twenty-one students took part in a course called Health Care Needs in the Adolescent Period while the experimental group of twenty-five students attended a course in Health Care Needs in the Postretirement Period. Palmore's Facts on Aging Quizzes: Part 1 (1977) and Part 2 (1981) were used as tools for the study. Both groups received the quizzes on

the first day of class and on the last day of class. Additional variables collected from the students included age and career choice.

The experimental group's course emphasized "...aging as a normal developmental process" (p. 154). Methods of instruction varied and clinical experiences were one to one with well geriatric clients in the client's home. Before the classes, which the students themselves picked, both groups showed no significant difference at $t=1.29$, $p>0.05$ in the mean net bias scores from Palmore's quizzes.

After the classes were completed, the experimental group had attitudes that were more positive and an increased knowledge base about geriatric clients when compared to the control group. A larger percentage of the experimental group than the control group showed an interest in working with the elderly. This study indicated that those who had positive experiences with the elderly were more likely to have positive attitudes about the elderly and were more likely to want to work with the elderly.

Slotterback & Saarnio (1996) conducted a study on attitudes and knowledge about older adults and aging. One hundred sixty-nine undergraduate students in a large Midwestern university who were enrolled in introductory psychology classes participated in the study voluntarily.

Two attitudinal questionnaires, one using open-ended questions and the other using task-rating, were given to the students.

In the open-ended task, the participants were given a sentence stem and were asked to provide descriptors of older adults, middle-aged adults and young adults.... In the task-rating, participants read the same sentence stem as in the open-ended task, followed by 42 adjectives that completed the stem. (p. 565)

An example of the open-ended task question is “I think old people are...” Some of the adjectives offered were sick, mean, uneducated, happy, strong, and intelligent. The students considered an “...older adult to be 66.2 years old (range 50-80), middle age to be 41.4 years old (range 30-55) and younger adult to be 21.9 years old (range 15-35)” (p. 565).

“The results showed that attitudinal tasks and the types of attributes assessed will affect the amount of negativity and the patterns of attitudes that are formed” (p. 568). Examining the task-rating, attitudes toward the elderly in the cognitive category were positively significant at a $p < 0.01$ significance level and in the personal-expressive category at a $p < 0.01$ significance level. However, in the physical category the attitudes were negatively significant at a $p < 0.01$ significance level.

On the other hand, examining the open-ended tasks, attitudes toward the elderly in the cognitive category were positive at a $p < 0.01$ significance level and were neutral in the personal-expressive category at a significant level of $p < 0.01$. In addition, in the physical category the attitudes were negatively significant at a $p < 0.01$ significance level.

Although this study did not show the negativity for the elderly that is commonly believed to exist, the results did indicate that when students were tested about the attitudes towards older adults the type of test affected how negative or positive the results will be.

The above articles addressed students and their attitudes and biases toward the elderly. Dail & Johnson (1992) and Duerson, Thomas, Chang, & Stevens (1992) seem to suggest that additional education in aging is a key to improving attitudes and knowledge toward the elderly and correcting biases. Giardina-Roche & Black (1990), Heilker, et al. (1993), Slotterback & Saarnio (1996) and Rose's (1984) suggested that although most students do not want to work with the elderly after graduation, those who have had positive experiences with the elderly have more positive attitudes towards the elderly than do students who have had negative experiences.

Attitudes of healthcare personnel whose primary focus is not geriatric client.

The next two articles examined nursing personnel and their attitudes about the elderly. These articles also examined demographic variables to discover if various demographic variables were related to nursing personnel's attitudes.

Campbell (1971) examined 149 registered nurses, licensed practical nurses and nursing assistants' attitudes about the elderly and the various variables that help to develop these attitudes. The study investigated three items.

1. The relationship between acceptance by nursing care personnel of stereotypes about old people and the nurse's characteristics.
2. The relationship between acceptance of stereotypes concerning old people and the age group with which the nurses prefer to work with.
3. The relationship between the incentives of shift preference or salary differential and increased willingness to work with geriatric patient. (p. 148)

Campbell's (1971) study was conducted in two similarly sized teaching hospitals in North Carolina. An objective questionnaire was designed by Tuckman and Lorge (1953) to test the attitudes of nursing staff about the elderly. This questionnaire was developed specifically for the study. Tuckman and Lorge (1953) designed the questionnaire used in this study by:

1. Holding semi-structured interviews with adults about attitudes toward old people.
2. Reading case records of older clients under the care of a family agency and an institution for the aged.
3. Discussing attitudes of nursing-care personnel with social workers and directors of institutions for the aged.
4. Reviewing the literature about attitudes toward the aged.

5. Classifying the 137 statements, which then comprised the questionnaire, independently by each of the authors and then categorizing these statements into the 88 statements that were significant at $p < .01$ level. (p. 148)

The validity of the questionnaire was shown previously at a $p < .01$ level as the statements related to "...their pertinence to old people" (p. 148). A total of 149 registered nurses, licensed practical nurses and nursing assistants returned the questionnaire during the 24 hours of the study. Demographic variables were also surveyed.

The findings indicated, "...that none of the categories of nursing care personnel demonstrated a lack of stereotyped attitudes concerning the elderly" (p. 149). Twenty-five percent of licensed practical nurses and twenty-three percent of nursing assistants preferred working with the elderly compared to four percent of registered nurses.

Statements made by the authors but not supported by statistics follow.

1. Registered nurses spent much less time caring for the elderly compared to licensed practice nurses and nursing assistants.
2. An increase in salary or shift preference did not increase the desire to work with the elderly.
3. The levels of education and time spent with the elderly does decreased acceptance of stereotype bias.
4. Levels of education and time spent with the elderly do not increase the desire to work with the elderly.
5. Stereotyping of the elderly as a group affected the way they were cared for.
6. It is necessary for additional education to decrease stereotyping but additional education did not completely correct the problem. (p. 150).

Lookinland & Anson (1995) conducted a comparative descriptive-correlational study. The study compared demographic variables and attitudes of registered nurses and health career work-study students who worked with the elderly to determine if demographic variables were related to their attitudes toward the elderly. The demographic variables included "age, gender, ethnicity, education level, training in geriatrics, primary area of clinical work, years of clinical experience, type of work facility, amount of time spent with elderly people, and exposure to well vs. ill elderly people" (p. 53).

Eighty-two full-time and part-time nurses who worked on the rehabilitation and medical/surgical units of a 275-bed acute care hospital and 68 students enrolled in a community high school's regional occupational program for medical experience served as a convenience sample for this study (p. 50). Participation in the study was voluntary.

Kogan's Attitudes Toward Old People Scale (1961) was used for evaluation in this study. The scale has 34 statements of positive and negative attitudinal statements about geriatric clients randomly arranged to minimize subjects' set-bias responses.

A total of 118 surveys, 59 from nurses and 59 from students, were selected after all surveys were returned to ensure equal group sizes. Using one-way analysis of variance, significant differences ($p < 0.001$) were found between the scores of the nurses and students on the negative scale, "...i.e. students held less favorable attitudes toward elderly people. Mean scores on the Kogan's Attitudes Toward Old People Scale (1961) were similar with no significant differences found on this scale". (p. 52)

The results from the nurses suggested that some demographic variables are related to how participants feel about the elderly. Female, white nurses reported significantly more favorable attitudes toward the elderly than non-white females or males. On the other hand, high school seniors working on medical/surgical units held more favorable attitudes toward the elderly than

did students with less clinical experience. No significant relationships were found between the nurses' or students' attitudes and any other demographic data.

The findings of this study suggested, "health care workers are particularly at risk for increased negative attitudes toward old people due to their increased exposure to ill and infirm elderly people" (p. 48). However, it seemed that specific demographic variables could effect the attitudes of staff dealing with the elderly.

The findings of both Campbell (1971) and Lookinland & Anson (1995) suggest that specific demographic variables could be related to the attitudes of staff dealing with the elderly. Campbell's study suggested that the levels of education and time spent with the elderly were related to decreased acceptance of stereotype bias. Lookinland & Anson (1995) suggested that specific demographic variables, gender, ethnic background, and clinical experience of the students, were related to how participants feel about the elderly.

Attitude improvement toward the geriatric client with education and communication.

The next two articles described how education and communication improve attitudes toward geriatric clients. Gillis (1991) study identified the variables that cause positive and negative attitudes of nurses toward geriatric clients. Gillis believed this was a step toward improving attitudes.

Gillis (1991) identified the following variables: age, setting, length of service, formal education level, prior work experience, presence of aging role models, exposure to positive role models, ethnic background of nurse, degree of functional impairment of the elder, geriatric specialty units, and degree of exposure to elders in the work setting as factors in the formation of positive and negative attitudes of nurses toward geriatric clients.

Gillis interviewed Clinical Nurse Specialists and asked them how they felt the attitudes about geriatric clients could be changed. Clinical Nurse Specialists suggested two approaches to

improve the attitudes and behavior of nurses toward geriatric clients. The first approach was clinical nursing rounds. The second approach was participation in exercises in self-awareness. Clinical nursing rounds included a formal presentation of client case studies. As the nurses discussed the case studies, there was an opportunity for other nurses to provide support for one another and identify strategies for improving care and attitudes. In addition to clinical nursing rounds, nurses who are involved in client care conferences can improve care. Clinical rounds helped nurses address individual problems with other nurses, with family members and with the client him/herself.

The second approach suggested by the Clinical Nurse Specialists was participation in exercises in self-awareness. This included games, simulation, and role-playing. Although many researchers have identified variables that contribute to negative attitudes and behaviors of nurses, Gillis believed that by following the suggestions of Clinical Nurse Specialists viable solutions to improving the attitudes of nurses have been offered.

Biases and attitudes often direct nurses' communication with the elderly according to Harwood & Williams' study. Harwood & Williams (1998) used Hummert's (1994) stereotype sensitive model of intergenerational communication to examine their hypotheses. The Hummert's stereotype sensitive model (1994) "...proposed that when positive stereotypes of older adults are activated for young people in a intergeneration context, normal adult speech ensues. However, when negative stereotypes are activated, patronizing speech is more likely" (p. 119). The hypotheses for this study were:

- 1) Participants assigned to converse with a "despondent" older adult will provide more negative evaluation on the Perceptions of Intergenerational Communication Scale than those assigned to conversation with a "perfect grandparent."

2) Young adult participants with negative attitudes toward older adults in general and with higher levels of age (older age) identity will provide more negative evaluations of the Perceptions of Intergenerational Communication Scale than those with more positive attitudes and lower levels of age (younger age) identity. (p. 17)

The study sample consisted of 109 students from an introductory communication class at a large Midwestern university who participated in the study for extra credit. The students were randomly assigned to two groups. One group was given a picture of a perfect grandparent while the other group was given a picture of a despondent grandparent, along with a description of the grandparent's life that coincided with the picture that the group received.

When completing the Perceptions of Intergenerational Communication Scale, the students were asked to keep the picture within view. The participants used two questionnaires. The questionnaires were the Interpersonal Communication Satisfaction Inventory by Hecht (1978) (Com-Sat) and Williams and Giles (1996) Perceptions of Intergenerational Communication Scale (PICS).

The PICS is a scale that is comprised of a set of items designed to measure the characteristics of the communication and satisfaction dimensions in a quantitative fashion. Students then wrote an open-ended discussion with the grandparent.

The findings of Harwood & Williams' (1998) study indicated "...in intergenerational communication, there is a mixture of young over accommodation, elder under accommodation, elder attunement, communication constraint and restraint, affective valence and compassion" (p. 24). Behavior and attitudes toward geriatric clients depended on the type of grandparent presented to the student, thereby, partially confirming Hypothesis 1. The analysis also suggested "...that general attitudinal and identity issues also play a substantial role in determining such ratings, hence providing support for Hypothesis 2" (p. 25).

In summary, both articles attempted to explain how attitudes towards geriatric clients affect communication with the client. Gillis (1991) suggested several methods to improve the attitudes and behavior of nurses about geriatric clients, which included clinical nursing rounds, exercises in self-awareness, and case studies. All of these methods, according to the Gillis (1991), will improve how the health care staff deals with geriatric clients. These methods will help the staff to identify behaviors and attitudes toward geriatric clients depending on the type of client presented to the student. Harwood & Williams' (1998) study demonstrated that knowing what causes negative communication toward geriatric clients and using methods to improve these communications, were important ingredients in improving the care of geriatric clients.

Summary

The review of the literature presented indicated that attitudes affect treatment of geriatric clients. Education, communication, biases and behaviors affect the attitudes of healthcare workers and students who care for geriatric clients. Reviewed literature indicated that gender, ethnicity, clinical experiences and education made a difference in how geriatric clients was treated.

The literature however did not address practicing medical/surgical registered nurses who did not choose geriatrics as their specialty. This researcher examined selected demographic variables of medical/surgical registered nurses who were not educated to deal with the geriatric population but who are now placed in the position to care for geriatric clients and the relationship of these demographic variables to attitudes about geriatric clients. Perhaps if additional education can be directed at the appropriate persons, then negative biases, attitudes and behaviors can be changed.

Chapter 3

Data Collection

The data for this research study that was collected included demographic variables and Palmore's 1998 version of the Facts of Aging Quiz 1 (1977) in a multiple-choice format (see Appendix C). Palmore's Facts of Aging Quiz 1 (1977) has been established as a valid and reliable measure of knowledge and misconceptions about aging since it was created in 1977. Palmore's Facts of Aging Quiz 1 (1977) was used instead of the Palmore's Facts of Aging Quiz 2 (1978) since the second version of the quiz has not yet completed testing. Permission for the use of Facts of Aging Quiz 1 (1977) was received from Springer Publishing Company (see Appendixes A & B).

In Palmore's (1998) book *The Facts on Aging Quiz* (2nd ed.) three measurement tools are included. These are Facts of Aging Quiz Part 1 (1977), Facts of Aging Quiz Part 2 (1978), and The Facts of Aging and Mental Health Quiz (1987). Each quiz was designed in a true and false and a multiple-choice format. The latest revision of these quizzes was in 1998.

Palmore's Facts of Aging Quiz 1 (1977) was first designed in 1977 as a true and false simulation exercise to encourage students' interest in a course. In 1977 Palmore's article "Facts on aging: A short quiz," he stated that the purpose of the Facts of Aging Quiz 1 (1977) was, "An attempt to overcome problems with other available quizzes. These problems included the length of other available quizzes and confused factual statements with attitudinal statements" (p. 316).

Palmore (1977) designed the Facts of Aging Quiz 1 (1977) to cover "basic physical, mental and social facts and the most common misconceptions about aging" (p. 315). The first edition of the Facts of Aging Quiz 1 (1977) consisted of 25 true and false questions. Palmore designed the Facts of Aging Quiz 1 (1977) as a stimulus for group discussion and clarification of

misconceptions. Since its development, the Facts of Aging Quiz 1 (1977) has been used to identify frequent misconceptions about aging, to measure indirectly the bias toward aging, and to measure the knowledge before and after students received information about geriatric clients.

This original Facts of Aging Quiz 1 (1977) has undergone a number of revisions, two new quizzes have been added, and a multiple-choice version of all three quizzes has been created. Palmer found that the multiple-choice versions were more reliable than the true-false versions because they reduced the chance of guessing (Palmore (1998), p. x).

In addition, the multiple-choice versions examine the answers given to determine if the respondents' views about geriatric clients are positively biased, neutrally biased, or negatively biased. To achieve this, the answers are scored as correct, incorrect but positively biased, incorrect but neutrally biased, or incorrect but negatively biased. The validity of Palmore's Facts of Aging Quiz 1 (1977) has been documented in 150 known studies, journals, and books.

When Palmore (1980) wrote the article, "The facts of aging quiz: A review of findings," 25 different studies using the Facts on Aging Quiz 1 (1977) (FAQ) had been completed. In this article, Palmore reviewed the uses for the Facts of Aging Quiz 1 (1977) and then addressed the reliability and validity of the Facts of Aging Quiz 1 (1977). In Palmore's (1997) book, he suggested that reliability and validity have been established. He stated:

Reliability is high as shown by the consistency with which comparable education groups have similar mean scores and by similar scores on test and retest in control groups. (p. 670)

Palmore claimed primary validity for the quiz with his statistics presented in an article in 1977. Most of the statistics come from representative national studies or were substantiated by several small studies and are generally agreed upon by most gerontologists. (p. 671)

Other writers questioned Palmore's claim. In Miller and Dodder's (1980) study, they created an alternative form of the Facts of Aging Quiz 1 (1977). They hoped to establish that by changing the wording of questions in the Facts of Aging Quiz 1 (1977) that theoretical problems with the instrument could be corrected.

Miller and Dodder identified problems with the Facts of Aging Quiz 1 (1977) including ambiguous terminology, double-barreled statements such as question 13 that states, "The aged are more fearful of crime than are younger persons" (Palmore 1954, p. 4), and the definition of the poverty level as defined by the Federal Government. Miller and Dodder made changes to the Facts of Aging Quiz 1 (1977) to correct these problems. To test their beliefs, Miller and Dodder's (1980) revised Facts of Aging Quiz 1 (1977) and Palmore's original Facts of Aging Quiz 1 (1977) were given to 430 students, who were divided into two groups and each group was given one of the two quizzes.

A summary of Miller and Dodder's (1980) study indicated that vague terminology did not make a significant difference in how the questions were answered. Changing the definition of the poverty level as defined by the Federal Government to a number only increased the correct response rate by 6.3%. By changing the direction of the questions, the increase in correct responses was 26.2%. Double-barreled statements and elimination of question 13 did not make a significant difference in the results of the survey. This study indicated that the suggested changes did not make a significant difference in the responses. (pp. 673-678)

A study by Norris, Tindale, and Matthews' (1987) was designed to analyze the factor structure of the Facts on Aging Quiz 1 (1977) after Facts of Aging Quiz 2 was published. Norris, Tindale, and Matthews' (1987) analyzed the factor structure of Facts on Aging Quiz Part 1 (1977) in order to consider its reliability and validity as a research tool.

The researchers used three classes of undergraduate students, faculty and public health nurses for comparison. When completed in 1987, Norris, et al. believed that Palmore's Facts of Aging Quiz 1 (1977) should only be used in a classroom situation. According to Norris, et al., the changes suggested by other researchers would make Palmore's quizzes appropriate for research.

Demographic variables for this study included: gender, age, marital status, race, years of nursing practice, highest nursing degree obtained, specialty of nurse, type of institution where nurses work, courses about geriatrics or aging taken by nurses, and desire to work with geriatric clients. Using the data on demographic variables, this researcher hoped to discover which, if any, of the variables were related to the preconceived notions of the medical/surgical registered nurse about geriatric clients.

This researcher purchased a list of names of Registered Nurses currently practicing, living and registered in the State of Wisconsin from the State of Wisconsin Department of Regulation and Licensing. Criteria for inclusion in the study was determined by the specialty and age (18-64) of the nurse.

The State of Wisconsin Department of Regulation and Licensing list provided codes that identified the specialty of the nurse. This researcher excluded from the sample those nurses whose specialties eliminate all geriatric clients including pediatrics and labor and delivery. Also excluded were geriatric nurses who work in long-term care.

Surveys were sent electronically to those nurses who met the above criteria and had e-mail addresses. E-mail addresses were included on the list from the state if the nurse had included it with the information she/he provided when they returned their licensing registration. A letter describing the study, explaining the survey and explaining how confidentiality and anonymity was protected accompanied the survey (see Appendix D).

For confidentiality, surveys were returned to an intermediary web site that removed the addressee's name and forwarded it on to this researcher. This web site was the WWW Survey Assistant at <http://or.psychology.dal.ca/~wcs/hidden/SAdocs/how.html>. This site helped this researcher to create an Hypertext Markup Language (HTML) web form to display the survey, generated a Common Gateway Interface (CGI) program to run the survey and installed both of these on World Wide Web (WWW) Survey Assistant's server on this researcher's computer. To keep the confidentiality of those who respond to the survey, this researcher did not install this program on her personal site. Instead, the responses were forwarded without the sender's e-mail address.

This researcher's Internet address, which was separate from the site where surveys were to be returned, was listed in the consent form and participants were welcome to request the results of the survey by e-mail from this researcher. Data will be stored on a computer CD disk and on paper, both of which will be kept for three years in a locked file cabinet in this researcher's home.

Organization of Data

From the list supplied by the State of Wisconsin Department of Regulation and Licensing, 15,000 nurses met the criteria for the survey. This researcher attempted to collect 150 responses to the survey from the above nurses. After numbering the available nurses, this researcher created a random number list and used it to send out the surveys by e-mail to the selected nurses. Initially, this researcher sent out 150 e-mails. When, after waiting, the 150 responses were not achieved, then this researcher sent out two more groups of 150 e-mails each to the next groups of nurses from the random number list. This process continued until 150 responses were received.

The Statistical Package for Social Sciences (SPSS) Graduate Version 11, was used to analyze the data at a level of significance of $p < 0.05$. Measurements from SPSS included: frequency tables, percentages, Chi-square and Cramer's V tests. Frequency tables were used to determine the natural breakdowns of information received.

Chi-square was used to test how well the distribution of a set of observed data matches a theoretical probability distribution. Cramer's V was a correlation coefficient that indicated the strength of relationship between two categorical variables. Cramer's V ranges from 0, with 0 indicating no relationship and -1 or 1 indicating a perfect relationship. (Munro, B. (1997))

From the results of The Facts of Aging Quiz 1 (1977), this researcher scored whether or not the preconceived notions expressed were correct, incorrect but positively biased, incorrect but neutrally biased, or incorrect but negatively biased. These results were then examined using SPSS to determine if a relationship existed between the demographic variables and preconceived notions.

To achieve comparable results with some of the tests, it was necessary to recode (combine) information to meet the requirements of the quiz. To recode, this researcher took the original data and regrouped it so that it was easier to use and more accurate. An example of this would be the number of years that nurses surveyed worked in the occupation.

Because the data was widely distributed, it was necessary to combine the data to make it easier to work with. By combining the years of nursing and renumbering them to a smaller unit (such as 1=under 1 year, 2=1-5 years, 3=6-10 years, 4=11-15 years, 5=16-20 years and 6=over 20 years), comparison was easier and more accurate.

How Data Will Be Used

The findings of this study will be a foundation for further research to determine changes needed in nursing education in order to change preconceived notions of nurses. A report was

created using the results of this study to indicate the degree to which nurse's preconceived notions about geriatric clients are correct or incorrect. This is supported by the use of graphs, charts and a summary of the collected data.

The results did indicate that there were incorrect biases, whether positive, neutral, or negative. This researcher would like to develop classes, in-services or other methods in an attempt to enlighten and modify the preconceived notions of nurses about geriatric clients.

As the geriatric population increases, the identification of biases held by nurses is imperative. In the near future, the more commonly seen client population for many nurses in the nation will be geriatric clients. To better serve geriatric clients and their families, nurses need a better understanding of these clients as well as methods to work with this population effectively.

Chapter 4: Data Analysis

Four hundred and fifty surveys were e-mailed to medical/surgical registered nurses from the list purchased from the State of Wisconsin Department of Regulation and Licensing of registered nurses who are currently practicing, living and registered in the State of Wisconsin. Of these 450 surveys, 214 were returned for a 47.5% response rate. Of these 214 responses, 156 surveys met the criteria. Those that did not meet the criteria included five responses from nurses aged 65 or over, and seven incomplete responses. The remaining 46, which were excluded, came from nurses not currently working with geriatric clients because of their specialty or who work in long-term care facilities. The data was analyzed using the Graduate Edition of SPSS 11.0 data analysis program. Frequency, crosstabs, Chi-square and Cramer's V tests were performed for analysis.

Descriptive Statistics

Palmore's Facts of Aging Quiz 1 (1997)

The multiple-choice version of Palmore's Facts of Aging Quiz 1 (1997) was administrated to examine the preconceived notions of medical/surgical registered nurses about geriatric clients. The respondents' answers were categorized as either correct, incorrect but positively biased (positive), incorrect but neutrally biased (neutral), or incorrect but negatively biased (negative). The answers were used to determine the respondents' preconceived notions about geriatric clients.

Table 1 presents the summary of the responses to the survey. Fifteen of the 25 survey questions were answered correctly by more than 50% of the respondents. This suggests that many of the medical/surgical registered nurses answering the survey had correct preconceived notions about geriatric clients.

Table 1: Responses to Palmore's Fact of Aging Quiz (1997) by percentage.

Questions from Palmore's Fact of Aging Quiz 1	Correct	Positive	Negative	Neutral
1. The Proportion Of People Over 65 Who Are Senile (have impaired memory, disorientation, or dementia) Is About 1 In 10	41.0	51.9	7.1	
2. The Senses That Tend To Weaken With Old Age Are All Five Senses	59.6	40.4		
3. The Majority Of Old Couples Continue To Enjoy Sexual Relations	86.5	13.5		
4. Lung Vital Capacity In Old Age Tends To Decline	55.1	44.9		
5. Happiness Among Old People Is More Common Than Among Younger People	56.4	25.0	17.9	
6. Physical Strength Tends To Decline With Age	78.8	19.9		
7. The Percentage Of People Over 65 In long-Stay Institutions (such as nursing homes, mental hospitals, and homes for the aged) Is About 5%	26.9		71.8	
8. The Accident Rate Per Driver Over Age 65 Is Lower Than The Accident Rate Per Driver Under 65	21.2		68.6	10.3
9. Most Workers Over 65 Work As Effectively As Younger Workers	58.3	30.1	10.9	
10. More Than Three Fourths Of People Over 65 Are Able To Do Their Normal Activities	71.2	28.8		
11. Adaptability To Change Among People Over 65 Is Present Among Most	48.7	14.7	34.6	
12. As For Old People Learning New Things Most Are Able To Learn, But At A Slower Speed	58.3	37.8	3.8	
13. Depression Is More Frequent Among Adults Under 65	27.6		52.6	19.9
14. Old People Tend To React Slower Than Younger People	61.5	37.8		
15. Old People Tend To Be More Alike In Some Respects And Less Alike In Others	51.9	12.2	6.4	25.6
16. Most Old People Say They Are Seldom Bored	50.6		48.7	
17. The Proportion Of Old People Who are Socially Isolated Is Less Than A Fourth	51.3	2.6	44.9	
18. The Accident Rate Among Workers Over 65 Tends to Be Lower Than Among Younger Workers	32.1		67.3	
19. The Proportion Of The U.S. Population Who Are Now Age 65 Or Over Is 13%	15.4			84.6
20. Medical Practitioners Tend To Give Older Patients Lower Priority Than Younger Patients	48.1	51.9		
21. The Poverty Rate (as defined by the federal government) Among Old People Is About The Same As Among Persons Under 65	5.8		93.8	
22. Most Old People Are Employed, Do Housework or Volunteer Work, Or Would Like Some Kind Of Work	85.9	10.3	3.8	
23. Religiosity Tends To Be Greater In The Older Generation Than In The Younger Generation	26.9			73.1
24. Most Old People Say They Are Seldom Angry	70.5		29.5	
25. The Health And Economic Status Of Old People (compared with younger people) In The Year 2010 Will Be Higher Than Now	36.5		63.5	

Note: Not all questions were answered each time; totals may not equal 100%.

Questions, 1 and 20, both at 51.9%, were answered with a positive bias, meaning that nurses answered the question incorrectly and had a favorable attitude about geriatric clients. The findings suggest that nurses believed that the proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is less than 1 in 10, and that nurses believed that medical practitioners give a higher priority to older patients than to younger patients

Two of the questions were answered with a neutral bias, Question 19 at 84.6% and Question 23 at 73.1%, meaning that nurses answered the question incorrectly and did not have a favorable or unfavorable attitude about geriatric clients. Nurses responding to Question 11 were uncertain of the proportion of the U.S. population who are now aged 65 or over. In addition, the nurses did not agree on the religiosity of the geriatric generation vs. the younger generation. Less than half of the nurses chose the correct answer, which is that the older generation, believe more in religion than does the younger generation.

Six questions were answered with a negative bias, meaning that nurses answered the question incorrectly and had an unfavorable attitude about geriatric clients. These findings showed in Question 7 that 71.8% of the nurses believed that 10% to 25% of the geriatric population is in a long-stay institution. In Question 8, 68.6% of the nurses believed that older drivers had a higher accident rate. Also in Question 18, 67.3% of the nurses believed that the accident rate among workers over 65 was higher, the same or unknown compared to younger workers.

Questions 21 and 25 address the economic status and health of geriatric clients. The majority of nurses who responded believed that the poverty rate among old people is higher than among persons under 65. Similarly, the respondents believed that the health and economic status of old people in the year 2010 will be lower than at the present time. Responses to Question 13 indicated that nurses believed that depression is more frequent among adults over 65, which is an incorrect assumption.

Although the majority of nurses did not respond with a negative bias, this researcher felt Question 16 needed to be addressed in the negatively biased group. The majority of the responses were correct at 51.3%; however, 48.7% of the responses were negatively biased. This

means that almost half of the nurses believed that most old people were usually or often bored or that geriatric clients find life monotonous.

The results of this survey suggest that medical/surgical registered nurses do have preconceived notions. The majority of the respondents answered ten of 25 questions (40%) incorrectly.

Demographic Information

Of the ten demographic variables included in the survey, responses to three of the variables were not diverse enough to determine whether a relationship between the variable and preconceived notions of medical/surgical registered nurses exists. Therefore, the following variables were not used to determine whether a possible relationship between demographic variables and preconceived notions of medical/surgical registered nurses exist.

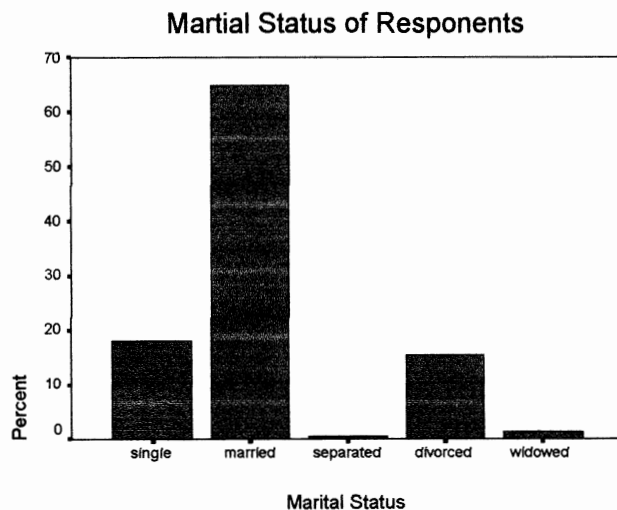
- Ethnicity: Caucasian 96.8%, African American 1.9%, Asian 1.3%
- Type of institution where nurses worked: Hospital 89.1%, Clinic 10.9%
- Specialty of the nurse: Medical/surgical registered nursing 100%

GENDER

Of the respondents, 7.7% were male compared to 92.3% who were female. Even though the ratio of male to female was low, the percentage was similar to the State of Wisconsin's (State of Wisconsin Department of Regulation and Licensing, 2002) breakdown of nurses by gender. In the State of Wisconsin, 7.1% of registered nurses are male and 92.9% are female. Therefore, this percentage allowed this researcher to examine the data to determine if a relationship between gender and preconceived notions of medical/surgical registered nurses existed.

MARITAL STATUS

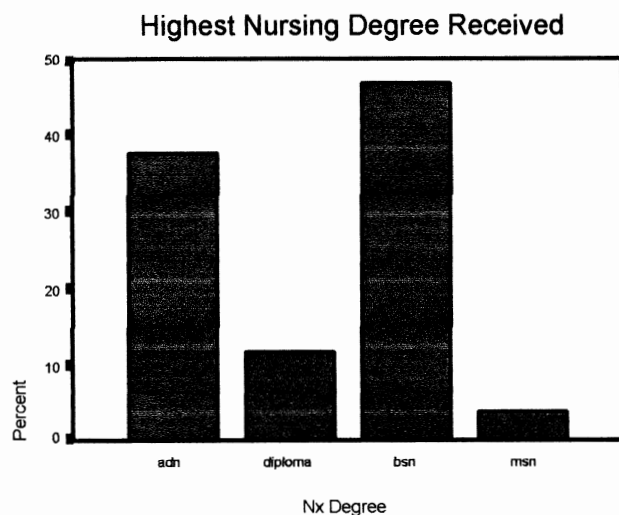
Figure 1: Marital Status



The respondents of the survey were asked to indicate their marital status. The majority of those responding, 64.7%, were married. The remaining respondents were: 17.9% single, 15.4% divorced, 1.3% widowed, and .6% separated.

HIGHEST NURSING DEGREE RECEIVED

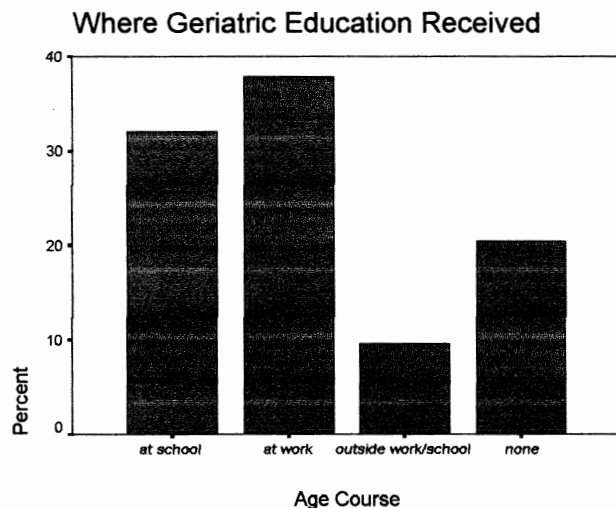
Figure 2: Highest Nursing Degree



The next variable examined was the highest nursing degree received by those who responded to the survey. The largest group of respondents, 46.8%, had a Baccalaureate of Science in Nursing (BSN) degree. Those with an Associated Degree in Nursing (ADN) represented 37.8%; Diploma nurses equaled 11.5%. Those holding a Masters in Nursing (MSN) equaled 3.8%.

WHERE GERIATRIC EDUCATION WAS RECEIVED

Figure 3: Geriatric Education



Those who responded to the survey were asked whether or not they received geriatric education, and if so where it was received. Those who received their education at work equaled 37.8%. Those who received their education at school equaled 32.1%. Another 9.6% stated that they received geriatric education outside

school or at work. The remaining 20.5% of the respondents did not receive any geriatric education.

DESIRE TO WORK WITH THE GERIATRIC CLIENT

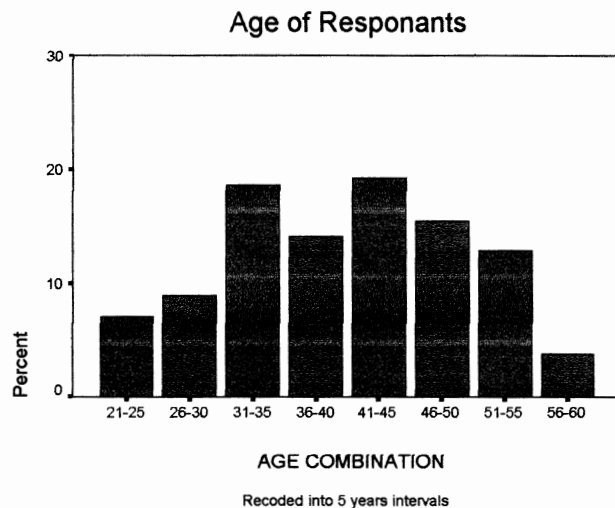
This researcher was also interested in discovering how many respondents to the survey were interested in working with geriatric clients. A majority of the respondents, 75.6%, stated a desire to work with geriatric clients. However, 24.4% of those responding stated that they did not want to work with geriatric clients.

AGE AND YEARS OF EXPERIENCE

The ages and years of experience of those who responded to this survey were widely distributed. Due to the difficulty it would present in evaluating preconceived notions of medical/surgical registered nurses related to their age or years of experience in nursing, these two categories were recoded into five-year intervals.

Age

Figure 4: Age of Respondents

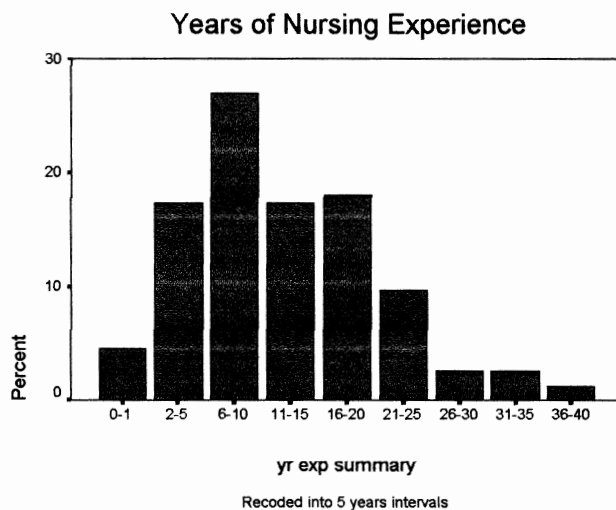


The ages of the respondents ranged from 23 to greater than 65. However, those 65 or over were excluded when examining the data. The mean age of those responding was 40.44 years old. The largest group of nurses responding (19.2%) was between 41-45 years old.

The second largest group, 18.6%, was between 31-35 years old. The smallest groups of respondents were at both ends of the age range.

Years of Experience

Figure 5: Years of Experience



The respondents' range of years of experience was 1 year to 40 years. The mean year of experience was 12.37 years. The largest group was 26.9%, who stated that they had between 6 and 10 years of experience. Those who stated that they had between 11-15 were at 17.9%; 2-5 years and 16-20 years of

experience were at 17.3% each. The smallest percentage of the respondents was 13% of nurses who had 36-40 years of experience.

Inferential Statistics

Previously, it was noted that two of the survey questions were answered with a positive bias, two with a neutral bias, and six with a negative bias. Using the Chi-square and Cramer's V test, the following inferential statistics examined the strength of relationship between demographic variables and preconceived notions of medical/surgical registered nurses.

Table 2: Statistical Relationship of Demographical Variables and Positively Biased Survey Questions

Question	Gender	Age Summary	Marital Status	Years Experience Summary	Nursing Degree	Age Related Course	Chose To Work
Question 01							
Chi-square	.439	.030*	.019*	.838	.852	.003*	.019*
Cramer's V		.286**	.154**			.252**	.225**
Question 20							
Chi-square	.644	.004*	.021*	.048*	.353	.007*	.308
Cramer's V		.368**	.272**	.317**		.277**	

Note: Results from Chi-square and Cramer's V statistical test

Chi-square refers to how well the distribution of a set of observed data matches a theoretical probability distribution.

Cramer V refers to the likelihood that there is a relationship between variable and notion.

* Represent a significant level at $p \leq .05$ or less.

** Refers to the likelihood that there is a relationship between variable and preconceived notion according to the Cramer's V statistical test. Numbers range from .00 to 1.0 with the higher the number the more likely a relationship.

Table 2 examines the relationship between the incorrect positively biased answers to the survey and the demographic variables using the Chi-square statistical test and Cramer's V statistical test. The Chi-square test is a statistical calculation used to test how well the distribution of a set of observed data matches a theoretical probability distribution. The calculated value is equal to the sum of the squares of the differences divided by the expected values.

The Cramer's V test is a correlation coefficient that indicates the relationship between two categorical variables. Cramer's V ranges from 0, with 0 indicating no relationship and -1 or 1 indicating a perfect relationship. (Munro, B. (1997))

Question 1: The proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is about 1 in 10.

Using the Chi-square test, statistical significance was shown between the question and some of the demographic variables. These demographic variables included age at $p=.030$, marital status at $p=.019$, age related courses taken at $p=.003$, and choosing to work with geriatric clients at $p=.019$.

The Cramer V test suggested no relationship between the question and demographic variables. The relationship values were age at .286, marital status at .154, age related courses taken at .252, and choosing to work with geriatric clients at .225.

There was statistical significant between the responses to the question and the variables of age, marital status, age related courses taken, and choosing to work with geriatric clients using the Chi-square test. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Question 20: Medical practitioners tend to give older patients lower priority than they give younger patients.

Using the Chi-square test, statistical significance relationship between the question and some of the demographic variables was demonstrated. These demographic variables included age at $p=.004$, marital status $p=.021$, years of nursing experience $p=.048$, and age related courses taken at $p=.007$.

The Cramer V test indicated no relationship between the question and demographic variables. The relationship values were marital status at .272, age related courses taken at .277, age at .368, and years of experiences in nursing at .317.

Using the Chi-square test, statistical significance exists between the question and the demographic variables of age, marital status, years of nursing experience, and age related courses taken. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

The relationship between the incorrect neutrally biased answers to the survey and the demographic variables using the Chi-square and Cramer's V statistical test are displayed in Table 3.

Table 3: Statistical Relationship of Demographical Variables and Neutrally Biased Survey Questions

Question	Gender	Age Summary	Marital Status	Years Experience Summary	Nursing Degree	Age Related Course	Chose to Work
Question 19							
Chi-square	.124	.148	.023*	.418	.008*	.042*	.047*
Cramer V			.027**		.275**	.230**	.159**
Question 23							
Chi-square	.876	.254	.019*	.002*	.024*	.803	.605
Cramer V			.275**	.393**	.246**		

Note: Results from Chi-square and Cramer's V statistical test

Chi-square refers to how well the distribution of a set of observed data matches a theoretical probability distribution.

Cramer V refers to the likelihood that there is a relationship between variable and notion.

* Represent a significant level at $p \leq .05$ or less.

** Refers to the likelihood that there is a relationship between variable and preconceived notion according to the Cramer's V statistical test. Numbers range from .00 to 1.0 with the higher the number the more likely a relationship.

Question 19: The proportion of the U.S. population who are now age 65 or over is 13%.

Using the Chi-square test, statistical significance was indicated between the question and demographic variables of marital status at $p=.023$, highest nursing degree obtained at $p=.008$, age related courses taken at $p=.042$, and choosing to work with geriatric clients at $p=.047$.

The Cramer V test indicated no relationship between the question and demographic variables. The relationship values were marital status at .027, nursing degree at .275, age related courses taken at .230 and choosing to work with geriatric clients at .159.

Statistical significance was shown using the Chi-square test between the question and the variables of marital status, nursing degree, age related courses taken, and choosing to work with geriatric clients. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Question 23: Religiosity tends to be greater in the older generation than in the younger generation.

Using the Chi-square test, statistical significance was found between the question and demographic variables, marital status at $p=.019$, years of nursing experience at $p=.002$, and highest nursing degree obtained at $p=.024$.

The Cramer V test indicated no relationship between the question and demographic variables. The relationship values were of marital status at .275, nursing degree at .246, age related courses taken at .277, and years of nursing experience at .393.

Statistical significance was shown using the Chi-square test between the question and the variables of marital status, years of nursing experience, and highest nursing degree obtained. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Table 4 examines the relationship between the incorrect negatively biased answers to the survey and the demographic variables using the Chi-square and Cramer's V statistical test. No statistically significant relationship was found between any of the variables and:

- Questions 18: The accident rate among workers over 65 tends to be lower than among younger workers and
- Question 25: The health and economic status of old people (compared with younger people) in the year 2010 will be higher than now.

Table 4: Statistical Relationship of Demographical Variables and Negatively
Biased Survey Questions

Question	Gender	Age Summary	Marital Status	Years Experience Summary	Nursing Degree	Age Related Course	Chose to Work
Question 07							
Chi-square	.037*	.001*	.336	.010*	.352	.229	.056
Cramer V	.205**	.336**		.319**			
Question 08							
Chi-square	.193	.064	.305	.000*	.100	.054	.007*
Cramer V				.382**			.251**
Question 13							
Chi-square	.401	.255	.379	.309	.283	.013*	.936
Cramer V						.227**	
Question 18							
Chi-square	.374	.333	.291	.667	.488	.597	.846
Cramer V							
Question 21							
Chi-square	.641	.899	.000*	.587	.292	.128	.179
Cramer V			.340**				
Question 25							
Chi-square	.313	.499	.632	.715	.390	.279	.413
Cramer V							

Note: Results from Chi-square and Cramer's V statistical test

Chi-square refers to how well the distribution of a set of observed data matches a theoretical probability distribution.

Cramer V refers to the likelihood that there is a relationship between variable and notion.

*Represent a significant level at $p \leq .05$ or less.

** Refers to the likelihood that there is a relationship between variable and preconceived notion according to the Cramer's V statistical test. Numbers range from .00 to 1.0 with the higher the number the more likely a relationship.

Question 7: The percentage of people over 65 in long-Stay institutions (such as nursing homes, mental hospitals, and homes for the aged) is about 5% according to government statistics.

Using the Chi-square test, statistical significance was found between the question and the demographic variable of age at $p=.001$, gender at $p=.037$, and years of nursing experience $p=.010$.

The Cramer V test indicated no relationship between the question and demographic variables. The relationship values were gender at .205, years of nursing experience at .319, and age of the nurse at .366.

Statistical significance was shown using the Chi-square test between the question and the variables of age, gender, and years of nursing experience. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Question 8: The accident rate per driver over age 65 is lower than the accident rate per driver under 65.

Using the Chi-square test, statistical significance relationship was found between the question and demographic variables of nursing experience at $p=.000$ and choosing to work with geriatric clients at $p=.007$.

The Cramer V test indicated no relationship between the question and demographic variables. The relationship values were choosing to work with geriatric clients at .251 and the years of nursing experience at .382.

Statistical significance was shown using the Chi-square test between the question and the variables of nursing experience and choosing to work with geriatric clients. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Question 13: Depression is more frequent among adults under 65 than adults are over 65.

Using the Chi-square test, statistical significance was found between the question and demographic variable of age related courses taken at a significant level of $p=.013$.

The Cramer V test indicated no relationship between the question and one demographic variable. This factor was age related courses taken at .227.

Statistical significance was shown using the Chi-square test between the question and the variable of age related courses taken. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Question 21: The poverty rate (as defined by the federal government) among old people is about the same as among persons under 65.

Using the Chi-square test, significance between the question and demographic variable of marital status, was demonstrated at $p=.000$. The Cramer V test indicated no relationship between the question and one demographic variable. This factor was marital status at a level of .340.

Statistical significance was shown using the Chi-square test between the question and the variables of marital status. However, when using the Cramer V test for strength of relationship, no relationship was shown to these variables.

Research Question

The major research question was: What are the preconceived notions of practicing medical/surgical registered nurses regarding the geriatric population? Using Palmore's multiple choice Facts of Aging Quiz 1 (1977) to address the research question, the data suggested that medical/surgical registered nurses have preconceived notions as indicated by the responses to the quiz.

Only two of the 25 notions were positively biased meaning that nurses answered the question incorrectly but had a favorable attitude about geriatric clients. These notions included beliefs that:

- The proportion of geriatric clients who are senile is less than 1 in 10.
- Medical practitioners give a higher priority to older patients compared to younger patients.

Two of the 25 notions were neutrally biased, meaning nurses answered the question incorrectly but did not have a favorable or unfavorable attitude about geriatric clients. These notions included beliefs that:

- Greater than 13% of the population is 65 or over.
- Religion does not increase as people age.

Six notions out of 25 were negatively biased meaning that nurses answered the question incorrectly but had an unfavorable attitude about geriatric clients. These notions included beliefs that:

- More geriatric clients are in long-stay institutions than actually are in long-stay institutions.
- Drivers over age 65 have a higher accident rate.
- Depression is more frequent among adults over 65.
- Boredom of geriatric clients is higher than it is for those under 65.
- The poverty rate among adults over 65 is at a higher rate than the government has determined that the rate is.
- The health and economic status of adults over 65 will be lower in 2010 than it is today.

In order to support or clarify the major research question, this researcher asked two additional questions. The data did not suggest that some of the survey questions are affected by a relationship between preconceived notions about geriatric clients and individual demographic variables of practicing medical/surgical registered nurses or that any of the demographic variables indicated a relationship to all the survey questions.

Although no one variable was strongly associated with preconceived notions, the results suggested that 40% of the preconceived notions were statistically significant to the variable, "choosing to work with the geriatric population." This suggested that there may be a statistical significance between that variable and preconceived notions but not a relationship. The variable, choosing to work with the geriatric population, was followed by the variables of age at 32%, of marital status and of age related course each at 28%, of years of experience at 24%, of nursing degree at 12% and of gender at 4%. Also suggesting that there may be a statistical significance between that variable and preconceived notions but not a relationship

Hypothesis

The hypothesis of this study states: There is a relationship between demographic variables and preconceived notions of practicing medical/surgical registered nurses about geriatric clients. The data collected for this study did not provide support for this researcher's stated hypothesis.

Summary

The major research question of the study was: What are the preconceived notions of practicing medical/surgical registered nurses regarding the geriatric population? The responses suggested that nurses do have incorrect preconceived notions. Not all of the questions, however, were incorrectly answered.

The hypothesis tested in this study was: There is a relationship between demographic variables and preconceived notions of practicing medical/surgical registered nurses about

geriatric clients. The hypothesis was not supported by the data collected. However, statistically significance relationship was found when comparing some of the demographic variables to some of the responses to the questions of the questionnaire. No one variable had a statistically significance relationship to the responses for all questions.

A statistical significance was found between Question 1, the proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is about 1 in 10, and demographic variables of:

- Age $p=.030$
- Marital status $p=.019$
- Age related courses taken $p=.003$
- Choosing to work with geriatric clients $p=.019$.

A statistical significance was found between Question 20, medical practitioners tend to give older patients lower priority than younger patients, and demographic variables of:

- Age at $p=.004$
- Marital status $p=.021$
- Years of nursing experience $p=.048$
- Age related courses taken at $p=.007$

A statistical significance was found between Question 19, the proportion of the U.S. population who is now age 65 or over is 13%, and demographic variables of:

- Marital status $p=.023$
- Highest nursing degree obtained $p=.008$
- Age related courses taken at $p=.042$
- Choosing to work with geriatric clients at $p=.047$.

A statistical significance was found between Question 23, religiosity tends to be greater in the older generation than in the younger generation, and demographic variables of:

- Marital status $p=.019$
- Years of nursing experience $p=.002$
- Highest nursing degree obtained $p=.024$.

Additionally, a statistical significance was found between Question 7, the percentage of people over 65 in long-stay institutions (such as nursing homes, mental hospitals, and homes for the aged) is about 5%, and demographic variables of:

- Gender at $p=.037$
- Age at $p=.001$
- Years of nursing experience $p=.010$.

In question 8, the accident rate per driver over age 65 is lower than the accident rate per driver under 65, showed a statistical significance between the question and demographic variables of:

- Years of nursing experience $p=.000$
- Choosing to work with geriatric clients at $p=.007$.

Question 13, depression is more frequent among adults under 65, showed only one demographical variable, age related courses taken, at a significant level of $p=.013$. Question 21, the poverty rate (as defined by the federal government) among old people is about the same as among persons under 65, also showed that one demographical variable, marital status, demonstrated a significant with the question at $p=.000$.

Chapter 5: Summary, Conclusions, and Recommendations

Summary

This exploratory, qualitative study examined the relationship between preconceived notions of practicing medical/surgical registered nurses about geriatric clients and selected demographic variables of the nurses living and practicing in the State of Wisconsin. This researcher hopes educators can use the data collected from the study to address preconceived notions when educating student nurses and offering education to practicing nurses.

A brief summary of the demographic information follows. The majority of respondents were female, Caucasian, and married with a mean age years of 40.44. Almost half of the respondents had received their BSN, and they had 12.37 years of experience.

Three-fourths of those responding stated that they had a desire to work with geriatric clients. Although 66% of those responding either received their geriatric education at work or school, this researcher found it disturbing that 21% of the respondents stated that they did not receive any geriatric education.

Of the 21% of the nurses responding who stated that they did not receive any geriatric education, 93.8% of those nurses work for hospitals. Joint Commission For Accreditation of Hospital Organizations (JCAHO) requires age appropriate teaching and care for all clients in the hospital. Although all staff must participate in classes to fulfill this age appropriate requirement, the majority of respondents stated that they have not received the required education. Many staff members find it difficult to change the way that they care for geriatric clients. It is important to adjust the teaching to the client's individual needs. Education is the key to caring for the individual geriatric client and the group as a whole.

The summary of the survey results suggested that medical/surgical registered nurses do have preconceived notions about geriatric clients. The majority of the respondents answered ten out of the 25 (40%) of the questions incorrectly.

Two of the questions were answered with a positive bias meaning that nurses believe that geriatric clients' lives were better than government statistics indicated that they were. The nurses believe that the proportion of people over 65 who are senile (have impaired memory, disorientation, or dementia) is less than 1 in 10, and that medical practitioners tend to give older patients higher priority than they give younger patients.

Two of the questions were answered with a neutral bias, meaning that nurses did not have a favorable or unfavorable attitude about geriatric clients. The nurses were unsure of the proportion of the U.S. population who are now aged 65 or over and their religious beliefs.

Six of the questions were answered with a negative bias meaning that the nurses believed that the lives of geriatric clients were inferior to what government statistics indicated that they are. The nurses believed that 10% to 25% of the geriatric population is in a long-stay institution rather than the actual proportion of 5%. Also, the nurses believed that geriatric clients have a higher driving accident rate than younger drivers, higher job related accident rate than younger workers, a higher poverty rate, and a higher incidence of depression than those under age 65. The respondents also believed that the health and economic status of geriatric clients in the year 2010 would be lower than it is now.

Conclusions

As previously noted, two of the survey questions were answered with a positive bias, two with a neutral bias, and six with a negative bias. The Chi-square and Cramer's V test were used to examine the relationship between demographic variables and preconceived notions of medical/surgical registered nurses.

No relationship was found between preconceived notions practicing medical/surgical registered nurses about geriatric clients and individual demographic variables of the nurses. In addition, no one variable was found to be statistically significant to all the preconceived notions of practicing medical/surgical registered nurses about geriatric clients.

This research's findings differ from other studies that found one or more demographic variable affecting preconceived notions of nurses. The Campbell's study used the Tuckman and Lorge's (1953) tool, which suggested that the levels of education and time spent with the elderly were related to decreased stereotype bias.

Lookinland & Anson's (1995) study found that female, white nurses reported significantly more favorable attitudes about the elderly than non-white females or males. In this researcher's study, the majority of those who responded were white and female. Therefore, it is difficult to determine if the results of this researcher's study agree or disagrees with the findings of Lookinland & Anson's (1995) study.

Although this researcher's study did not address how geriatric clients were treated, Harwood & Williams' (1998) and Gillis' (1991) indicated that demographic variables made a difference in how geriatric clients were treated. Although this researcher's study did not indicate that education made a difference in preconceived notions of nurses, Carter & MacInnes(1996), and Huber, Reno & McKenney's (1992) studies found that education did make a positive difference in how staff viewed the elderly.

Glasspoole & Aman's (1990) study indicated that most of the nurses who were working with the elderly were doing so by choice and were satisfied with their work. The Pursey & Luker (1995) study found that students and nurses are willing to work with individual clients but not the elderly as a whole. Although these studies did find one or more demographic variables that affected the preconceived notions of nurses, none of these studies looked directly at

medical/surgical registered nurses who are now seeing their clinical population increasingly change to geriatric clients.

Reflecting upon reasons why this researcher's results were different from those of related researchers, two possibilities came to mind. The first reason for this difference may be the social environment of today in which nurses are exposed. Mass media today portrays the geriatric population in a more realistic and accurate light. Through novels, short stories, newspaper items, Internet sites, movies, stage, radio, and television as a tool for learning, nurses are exposed to the geriatric population. The information portrayed may help to correct biases that are present in society in general. In addition, nurses have increased geriatric information, which is integrated into courses at school. This trend to integrate geriatric information into mainstream nursing is increasing yearly.

The second reason for this difference is the method in which the data was collected. The use of electronic methods of collection data, such as e-mail, is relatively new. This technology requires familiarity by the users and a computer with e-mail access. In order for the nurses to respond to this study's questionnaire, nurses needed to have an e-mail address and access to a computer. Therefore, the sample may have excluded nurses who did not have access to a computer and e-mail.

The ability of nurses who have e-mail and understand this technology varies from an inability to understand how to answer electronic surveys to technical expertise. This inability to understand how to answer electronic surveys may have created inaccurate responses thereby skewing the data. In addition, those nurses who understand how to use the computer have access to a wealth of current information available on all subjects including the geriatric population. These previous reasons may offer insight into why this researcher's results were different from those of other researchers.

Theoretical Framework

The theoretical framework for this study was Allport's (1954) Theory of Prejudice. The theory examines prejudice and its application to a variety of situations where attitude formation leads to prejudices. This researcher used the theory to examine demographic variables of healthcare workers and how these variables might affect attitudes, stereotypes, and categorization of geriatric clients.

By looking at a combination of healthcare worker's ages, years of experience, learning experiences, education, and desire to work with geriatric clients, this researcher examined the preconceived notions of healthcare workers that were formed by their attitudes and stereotypes. Frequently, it is the preconceived notions that form an immediate mental picture when one hears the term 'old' used to describe an individual. If previous experiences with the geriatric population were negative then a negative stereotype of this age group may have been formed.

Healthcare workers, as all individuals, have preconceived notions about aging and geriatric clients. As healthcare workers, it is necessary to become aware of where our attitudes, preconceived notions and prejudices about geriatric clients are faulty and to correct them.

Recommendations

Although this sample of medical/surgical registered nurses is small, the data revealed useful information on the beliefs and preconceived notions of medical/surgical registered nurses who are practicing at this time. This research will be useful to nurse educators who need to address how nurses perceive geriatric clients.

This research will assist nurse educators to better understand the various beliefs of nursing students about geriatric clients and investigate with the students their values and beliefs during the classroom and clinical instructions. Further, findings of this study may encourage nursing educators to address these notions and help correct the misconceptions.

In addition, this research may increase the awareness of nurse educators in staff development that preconceived notions about geriatric clients may exist in nurses under his/her responsibility. This will assist staff development educators to better understand the various beliefs about geriatric clients and investigate with the nurses ways to assess and change the beliefs that they hold about geriatric clients. Through in-services, self-study packets and individual instruction perhaps changes related to how nurses perceive their geriatric clients can be accomplished, thereby allowing nurses to gain appropriate information to be delivered to clients during their care, upon discharge or care in the home.

This research will assist client educators to examine their beliefs about the clients that they are working with. Through awareness of preconceived notions, the client educator can modify how he/she addresses and works with geriatric clients and improve communication and teaching techniques, therefore helping geriatric clients help themselves to achieve healthier lifestyles.

Further research needs to be done in the area of geriatrics and medical/surgical registered nurses' preconceived notions. This study needs to be expanded to examine whether the trends found in this study are consistent across the United States. This researcher also would like to survey nurses from specialties that do not include geriatric clients and long-term care nurses to see if these preconceive notions exist in nurses in every field or if preconceived notions are different with nurses who care for geriatric clients all the time. In addition, conducting this survey in a paper form may produce different responses than those produced by the e-mail responses.

Medical/surgical registered nurses have a profound influence on the outcome of their geriatric clients' recovery. This research provided a "sketch" of preconceived notions held by medical/surgical registered nurses. The findings of this study provided information that will

assist nurse educators in nursing education, staff development and client education. By designing educational programs to assist nurses to clarify their beliefs and provide factual information regarding geriatric clients, nurses' professional care to the elderly will improve. Through knowledge gained, the student or staff nurses will have a clearer understanding of their personal beliefs about their geriatric clients, thereby improving their care.

References

- Administration on Aging (2001, February 9). Profile of older adults: 2000. Retrieved June 2, 2001 from the World Wide Web: <http://www.aoa.gov/aoa/stats/profile/default.htm>
- Allport, G. W. (1954). *The nature of prejudice*. Reading, Massachusetts: Addison-Westley.
- Allport, G. W. (1979). *The nature of prejudice: the anniversary addition*. Reading, Massachusetts: Addison-Westley.
- Brayman, A., & Cramer, D. (2001). Quantitative data analysis with SPSS release 10 with windows. Philadelphia: Taylor & Francis, Inc.
- Campbell, M. (1971). Study of the attitudes of nursing personnel toward the geriatric patient. *Nursing Research*, 20(2), 147-151.
- Carter, H., & MacInnes, P. (1996). Nursing attitudes to the care of elderly patients at risk of continuing hospital care. *Journal of Advanced Nursing*, 24(3), 448-455.
- Dail, P., & Johnson, J. (1986). Measuring changes in undergraduate students' perceptions about aging using the Palmore's facts on aging quiz. *Gerontology & Geriatrics Education*, 5(4), 61-67.
- Duerson, M., Thomas, J., Chang, J., & Stevens, C. (1992). Medical students' knowledge and misconceptions about aging: responses to Palmore's facts on aging quizzes. *The Gerontologist*, 32(2), 171-174.
- Getzen, T. E. (1992). Population aging and the growth of health expenditures. *Journal of Gerontology: Social Sciences*, 47(3), 98-104.
- Giardina-Roche, C., & Black, M. (1990). Attitudes of diploma student nurses toward adult clients. *Journal of Nursing Education*, 29(5), 208-214.
- Gillis, D. (1991). Strategies to promote positive behavior toward elderly patients. *Clinical Nurse Specialist*, 5(3), 165-8.

- Glasspoole, L., & Aman, M. (1990). Knowledge, attitudes, and happiness of nurses working with gerontological patients. *Journal of Gerontological Nursing, 16*(2), 11-14.
- Harborne, A., & Sooly, A. (1996). Challenging behavior in older people: nurses' attitudes. *Nursing Standard, 11*, 39-43.
- Harwood, J., & Williams, A. (1998). Expectations for communication with positive and negative subtypes of older adults. *International Journal of Aging and Human Development, 47*-133.
- Hatton, J. (1977). Nurse's attitude toward the aged: relationship to nursing care. *Journal of Gerontological Nursing, 3*(3), 21-25.
- Heilker, D., Naughton-Walsh, M., Druyan, M., Hungelmann, J., Joacobs, M., LaPalio, L., Saddib-Madden, P., & Schulte, J. (1993). A study of professional health care students' attitudes toward older adults. *Journal of Nursing Education, 32*(8), 370-374.
- Huber, M., Reno, B., & McKenney, J. (1992). Long-term care personnel assess their attitudes and knowledge of the older adult. *Journal of Advanced Nursing, 17*, 14-21.
- Hummert, M. L. (1994). Stereotypes of the elderly and patronizing speech. Interpersonal communication in older adulthood (pp. 162-184). Thousand Oaks, CA: Sage.
- Kogan, N. (1961). Attitudes toward old people: the development of a scale and examination of correlates. *Journal of Abnormal Social Psychology, 62*, 44-54.
- Kovner, C. T., & Mezey, M. (2000). Nursing research publications on older adults. *Nursing Research, 49*(2), 63.
- Lookinland, S., & Anson, K. (1995). Perpetuation of ageist attitudes among present and future health care personnel: implications for elder care. *Journal of Advanced Nursing, 21*, 47-56.

- Miller, R., & Dodder, R. (1980). A revision of Palmore's facts on aging quiz. *The Gerontologist*, 20(6), 673-679.
- Munro, B. (Ed.). (1997). *Statistical Methods for health Care Research* (3rd ed.). New York: Lippincott.
- Norris, J., Tindale, J., & Matthew, A. (1987). The factor structure of the facts on aging quiz. *The Gerontologist*, 27(5), 673-676.
- Palmore, E. (1977). Facts on aging: a short quiz. *The Gerontologist*, 17(4), 315-320.
- Palmore, E. (1980). The facts on aging quiz: a review of findings. *The Gerontologist*, 20(6), 669-672.
- Palmore, E. (Ed.). (1998). *The Facts on Aging Quiz* (2nd ed.). New York: Springer Publishing Company.
- Pursey, A., & Luker, K. (1995). Attitudes and stereotypes: nurses' work with older people. *Journal of Advanced Nursing*, 22(3), 547-555.
- Rose, M. (1984). The importance of influencing nursing students' attitudes toward older adults. *Public Health Nursing*, 1(3), 152-157.
- Slotterback, C., & Saarnio, D. (1996). Attitudes toward older adults reported by young adults: variation based on attitudinal task and attribute categories. *Psychology and Aging*, 11(4), 563-570.
- Tuckman, J., & Lorge, I. (1953). Attitudes toward old people. *Journal of Social Psychology*, 37, 249-260.

Appendix A

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Milwaukee, WI 53207-1516

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Dear Dorothy Kouwenberg:

My name is Pat Krupski. I am a nursing master degree student at Cardinal Stritch University in Milwaukee, Wisconsin. I am interested in getting Permission to use the Facts on Aging Quiz 1(1977) that Erdman Palmore designed as a tool for my master's thesis. Previously, I wrote to you for permission to use this tool and you sent me the requirements that are necessary to receive this permission. I have enclosed the needed information.

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Thank you for your help.

Sincerely,

Patricia Krupski, BSN

Appendix B

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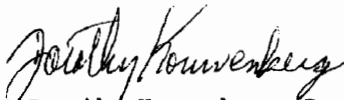
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Date: 4 June 2001

Appendix C

Click on your chosen answer to respond to the question. If you wish to change your answer just click on the new answer and the previous answer will be removed. After you have answered all questions, click on the SUBMIT box at the bottom of the survey.

Geriatric Nursing Survey

Demographical information

1. What Is Your Gender?

A. Male

B. Female

2. Please Enter Your Age: _____

3. What Is Your Marital Status?

A. Single Never Married

B. Married

C. Separated But Not Divorced

D. Divorced

E. Widowed

F. Significant Other

4. What Is Your Race?

A. Caucasian

B. African-American

C. Native American

D. Hispanic

E. Asian

F. Other _____

5. Enter Your Years Of Experience as a Nurse: _____

6. Your Nursing Education or Highest Nursing Degree held:

A. ADN

B. Diploma

C. BSN

D. MSN

E. Doctorate In Nursing

F. Other _____

7. Nursing Specialty

A. Medical/surgical registered nursing

B. ICU/CCU Nursing

C. Outpatient Nursing

D. Emergency Nursing

E. Psychiatry Nursing

F. Pediatrics/Neonatal Nursing

G. Geriatric Nursing (Long-term care)

H. OB/GYN Nursing

I. Other _____

8. Place of Employment:

- A. Hospital
- B. Clinic
- C. Physician Office
- D. Long-term Care Facility
- E. Home Health Care
- F. Public Health
- G. Temporary Nursing Agency (external pool)
- H. Other _____

9. Have You Taken Courses Related to Geriatrics or Aging? If yes:

- A. Nursing Education Program
- B. Work Setting
- C. Outside of Work or Nursing Education Program
- D. No

10. Do You Think You Would Like To Work With The Geriatric Patient?

- A. Yes
- B. No

Questions 11-35 refer to Palmore's Fact of Aging Quiz Questions

11. The Proportion Of People Over 65 Who Are Senile (have impaired memory, disorientation, or dementia) is:

- A. About 1 In 100
- B. About 1 In 10
- C. About 1 In 2
- D. The Majority

12. The Senses That Tend To Weaken With Old Age Are:

- A. Sight And Hearing
- B. Taste And Smell
- C. Sight, Hearing, And Touch
- D. All Five Senses

13. The Majority Of Old Couples:

- A. Have Little Or No Interest In Sex
- B. Are Not Able To Have Sexual Relations
- C. Continue To Enjoy Sexual Relations
- D. Think Sex Is Only For The Young

14. Lung Vital Capacity In Old Age:

- A. Tends To Decline
- B. Stays The Same Among Nonsmokers
- C. Tends To Increase Among Healthy Old People
- D. Is Unrelated To Age

15. Happiness Among Old People Is:

- A. Rare
- B. Less Common Than Among Younger People
- C. About As Common As Among Younger People
- D. More Common Than Among Younger People

16. Physical Strength:

- A. Tends To Decline With Age
- B. Tends To Remain The Same Among Healthy Old People
- C. Tends To Increase Among Healthy Old People
- D. Is Unrelated To Age

17. The Percentage Of People Over 65 in long-stay institutions (such as nursing homes, mental hospitals, and homes for the aged) Is About:

- A. 5%
- B. 10%
- C. 25%
- D. 50%

18. The Accident Rate Per Driver Over Age 65 Is:

- A. Higher Than For Those Under 65
- B. About The Same As For Those Under 65
- C. Lower Than For Those Under 65
- D. Unknown

19. Most Workers Over 65:

- A. Work Less Effectively Than Younger Workers
- B. Work As Effectively As Younger Workers
- C. Work More Effectively Than Younger Workers
- D. Are Preferred By Most Employers

20. The Proportion Of People Over 65 Who Are Able To Do Their Normal Activities:

- A. One Tenth
- B. One Quarter
- C. One Half
- D. More Than Three Fourths

21. Adaptability To Change Among People Over 65 Is:

- A. Rare
- B. Present Among About Half
- C. Present Among Most
- D. More Common Than Among Younger People

22. As For Old People Learning New Things:

- A. Most Are Unable To Learn At Any Speed
- B. Most Are Able To Learn, But At A Slower Speed
- C. Most Are Able To Learn As Fast As Younger People
- D. Learning Speed Is Unrelated To Age

23. Depression Is More Frequent Among:

- A. People Over 65
- B. Adults Under 65
- C. Young People
- D. Children

24. Old People Tend To React:

- A. Slower Than Younger People
- B. About The Same Speed As Younger People
- C. Faster Than Younger People
- D. Slower Or Faster Than Others, Depending On The Type Of Test

25. Old People Tend To Be:

- A. More Alike Than Younger People
- B. As Alike As Younger People
- C. Less Alike Than Younger People
- D. More Alike In Some Respects And Less Alike In Others

26. Most Old People Say:

- A. They Are Seldom Bored
- B. They Are Usually Bored
- C. They Are Often Bored
- D. Life Is Monotonous

27. The Proportion Of Old People Who are Socially Isolated Is:

- A. Almost All
- B. Almost Half
- C. Less Than a Fourth
- D. Almost None

28. The Accident Rate Among Workers Over 65 Tends to Be:
- A. Higher Than Among Younger Workers
 - B. About The Same As Among Younger Workers
 - C. Lower Than Among Younger Workers
 - D. Unknown Because There Are So Few Workers Over 65
29. The Proportion Of The U.S. Population Now Age 65 Or over Is:
- A. 3%
 - B. 13%
 - C. 23%
 - D. 33%
30. Medical Practitioners Tend To Give Older Patients:
- A. Lower Priority Than Younger Patients
 - B. The Same Priority As Younger Patients
 - C. Higher Priority Than Younger Patients
 - D. Higher Priority If They Have Medicaid
31. The Poverty Rate (as defined by the federal government) Among Old People Is:
- A. Higher Than Among Children Under 18
 - B. Higher Than Among Persons Under 65
 - C. About The Same As Among Persons Under 65
 - D. Lower Than Among Persons Under 65

32. Most Old People Are:

- A. Still Employed
- B. Employed Or Would Like To Be Employed
- C. Employed, Do Housework Or Volunteer Work, Or Would Like To Do Some Kind Of Work
- D. Not Interested In Any Work

33. Religiosity Tends To:

- A. Increase In Old Age
- B. Decrease In Old Age
- C. Be Greater In The Older Generation Than In The Younger
- D. Be Unrelated To Age

34. Most Old People Say They:

- A. Are Seldom Angry
- B. Are Often Angry
- C. Are Often Grouchy
- D. Often Lose Their Tempers

35. The Health And Economic Status Of Old People (compared with younger people) In The Year 2010 Will:

- A. Be Higher Than Now
- B. About The Same As Now
- C. Be Lower Than Now
- D. Show No Consistent Trend

You may change your answer by selecting another button. If you want to start over select the Clear All Button. When you are finished answering the questions, please select the Submit Button.

Thank you for your participation in this study.

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Appendix D

Consent Form

My name is Patricia Krupski, a graduate student in the Master of Science Nursing Program at Cardinal Stritch University in Milwaukee, Wisconsin. The purpose of my research project is to determine if there is a relationship between preconceived notions of practicing medical/surgical registered nurses toward geriatric clients and the nurse's demographic data.

According to the Administration on Aging (2001), the geriatric population is increasing in age and in number. As the geriatric population increases, their health care needs also increase. To decrease the complications of chronic illnesses, geriatric clients will need to learn how to deal with these illnesses. However, preconceived notions toward geriatric clients may affect the way that nurses teach and provide care for their geriatric clients.

To identify the preconceived notions of medical/surgical registered nurses, a survey has been e-mailed to you. The survey consists of 10 demographical questions and 25 questions from Erdman B. Palmore's *Facts on Aging Quiz I*. This survey will take approximately 15 minutes to complete.

In order to ensure confidentiality and anonymity, this survey will be returned to an intermediary site, WWW Survey Assistant's, which helps this research to create a web form to display the survey and forwards the survey to this researcher without the sender's e-mail address identified. By returning this survey, you have given your consent to participate in this research.

Information obtained will be recorded without the e-mail address of those who respond to the survey and the results will not be released in any way that could identify the participant in this project. Data from the surveys will be stored on a computer CD disk and paper copies for three years and kept in a locked file cabinet in this research's home.

While there are no immediate benefits that can be expected by participating in this study, the information derived may be useful scientifically and helpful to others. An awareness of preconceived notions held by nurses may benefit and improve educational presentation in educational curriculum and educational offerings to all nurses who are now caring for geriatric clients.

You will receive this message at the end of the survey when you submit it:

This form is being submitted by email. Submitting this form will reveal your email address to the recipient and will send the forms data without encrypting it for privacy.

The above statement can be ignored. As stated before, the email will be sent to the intermediary site where the email address will be removed. To participate in this study just click on this web site and continue: <http://www.angelfire.com/wi2/cvs33/survey.html>. The College of Nursing Research Advisory Committee of Cardinal Stritch University has approved this study. I would like to thank you in advance for your participation.

If you have any questions regarding this research, please call, e-mail or write:

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E-mail address: patkrupski@hotmail.com

If you have any complaints about your treatment as a participant in this study, please call or write:

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The Chairperson of Cardinal Stritch University Institutional Review Board.

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